

JVC

SERVICE MANUAL

MICRO COMPONENT SYSTEM

UX-A3 B/E/G/GI/EN



Area suffix

- B U.K.
- E Continental Europe
- G Germany
- GI Italy
- EN Northern Europe

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日本ビクター株式会社
MC-Service サービス部 部品管理課

1 Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer or responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by (Δ) on the schematic diagram and Parts List in Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List in Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.

When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

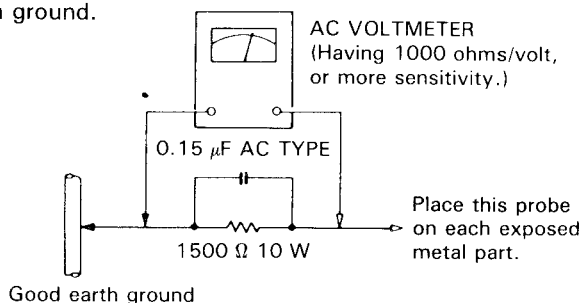
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

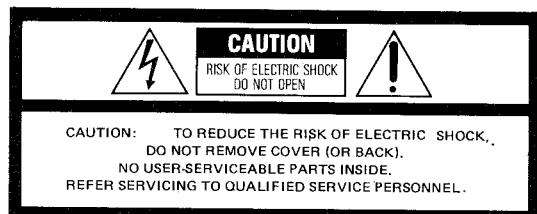
Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

2 Safety Precautions about UX-A3

IMPORTANT FOR LASER PRODUCTS PRECAUTIONS

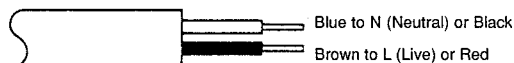
1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD door is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.

6. **CAUTION:** The laser is able to function, if safety switches are out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.

IMPORTANT (In the United Kingdom) Mains Supply (AC 240 V, 50 Hz only)

IMPORTANT

Do not make any connection to the larger terminal coded E or Green. The wires in the mains lead are coloured in accordance with the following code:



If these colours do not correspond with the terminal identifications of your plug, connect as follows:

Blue wire to terminal coded N (Neutral) or coloured Black.

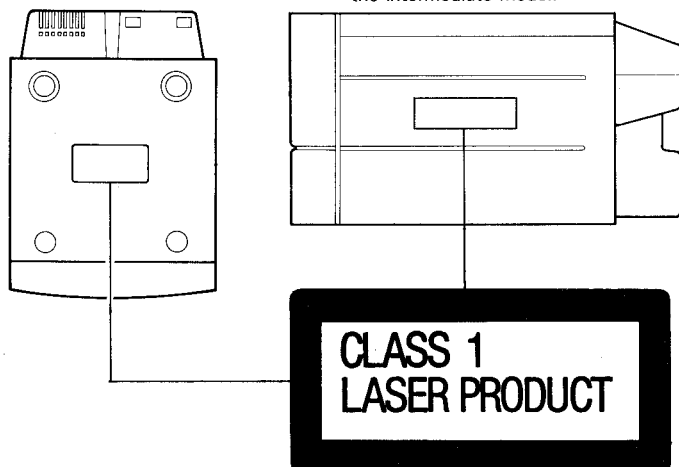
Brown wire to terminal coded L (Live) or coloured Red.

If in doubt — consult a competent electrician.

REPRODUCTION OF LABELS AND THEIR LOCATION

CD player/tuner section

The Class A label pasting position was changed from the intermediate model.

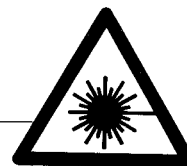
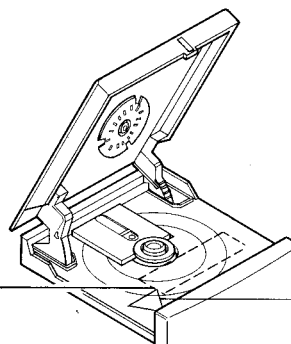


Obs:
Apparaten innehåller laserkomponent av högre laserklass än klass 1.

ADVARSEL-Der vil udstråles osynlig laserbestråling når apparatet åbnes og aflåsningsmekanismen frigøres. UNDGÅ AT BLIVE UDSET FOR LASERBESTRÅLING.

DANGER-Invisible laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM.

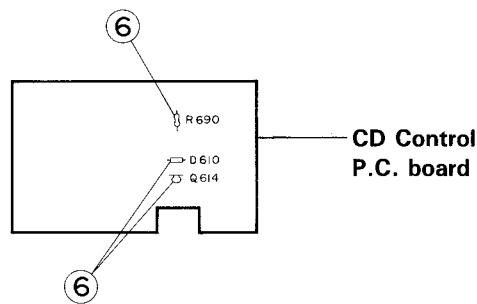
WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



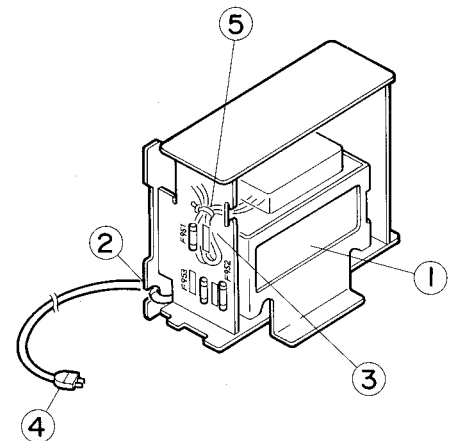
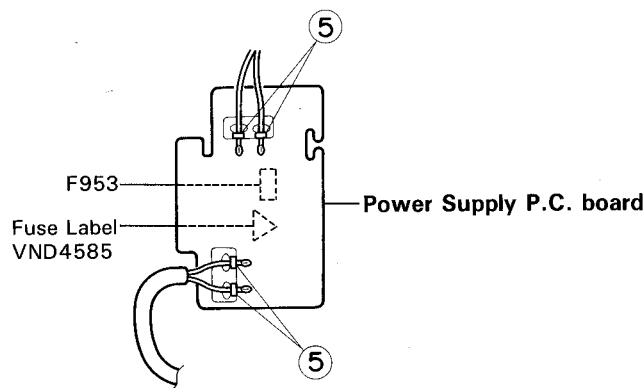
VAROITUS! Laite sisältää laserdiodin, joka lähettää näkymätöntä silmille vaarallista lasersäteilyä.

MC-Service

< CD, Receiver Sections >



< Power Supply Sections >



■ Important Management Points Regarding Safety

(Item demanding special safety precautions ... UX-A3 B/E)

Ref. No.	Description
1	Make sure that the parts number of the power transformer is No. VTP66T2-24ABS (UX-A3 B/E/G). Make sure that the setscrew is free from any looseness.
2	Strain relief is "4N-4", which must be fitted by the specific HEYCO tool and secures the power cord tightly.
3	The patterns of the primary circuit and adjacent circuits of printed circuit board should be free from round soldering protrusion in order to secure sufficient creeping distance.
4	Coloring to indicate polarity of power cords is as shown in figure. Attachment plug indicator: (S) KP-419C Cord: ◁ VIDEO ▷
5	Wires, etc. must be firmly clamped or fixed at the positions indicated in the above diagram so as not to contact with live parts, movable parts, heated parts and sharp edge parts.

Ref. No.	Description
6	Since heat is generated from the following parts, these parts should no be located adjacent to the electrolytic capacitor, etc. Tape Deck sections: D952, ICA05, ICA06, RA306 RA308, RA317 CD, Receiver sections: QF07, R690, Q614, D610, RF34 R641
7	Coloring to indicate poilarity of power transformer wires is as shown in figure.
8	parts on the back side of P.C. board must be secured spacer and bond, etc. (only in CD, Receiver sections)
9	AUX IN 3-pin wire must be arranged outside system wire.

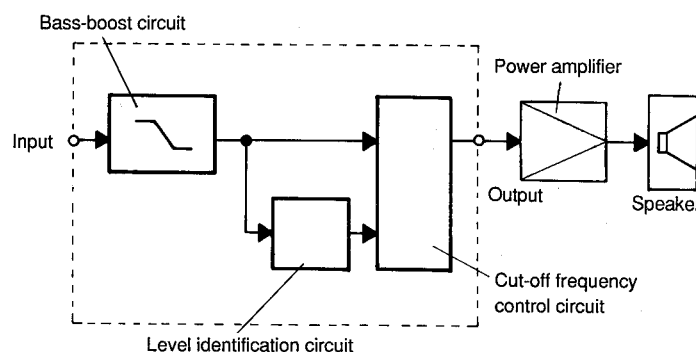
3 Features

- Disc-size micro component system consisting of 4 units, designed for stacked or side-by-side installation**
 - Consists of 4 units; a cassette deck/amplifier and a CD player/tuner, plus a pair of speakers.
- Newly-developed Active Hyper-Bass circuit for low-frequency sound reproduction**
 - The cut-off frequency is controlled by a level identification circuit to reinforce low-frequency sound.
- 24-key remote control unit opens and closes the motor-driven CD door, in addition to the usual CD and tuner operations**
 - Remote control controls power on/off switching, volume control, Active Hyper-Bass on/off switching and a variety of editing functions.
- Green-colored large backlit LCD (Liquid Crystal Display)**
 - Display includes 15-tune program chart, function mode, etc.
- Multi-function CD player**
 - Capable of auto-edit recording and programmed play.
- U-Turn auto-reverse mechanism with Dolby* B NR**
 - Auto tape select mechanism.
 - Metal (type IV) and CrO₂ (type II) tape can be played back for superior tone quality.
 - CrO₂ (type II) tape recording capability.
- 2-Band digital synthesizer tuner with 30-station (15 FM and 15 AM (MW/LW)) preset capability**
 - Seek/manual tuning.
- Timer/clock function**
 - Timer on/off with preset volume function.
 - Wake-up volume setting with 5 different levels.
 - Sleep timer can be set for up to 120 minutes.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

• Active Hyper-Bass circuit

Generally, since low-frequency sound is not reproduced satisfactorily by small speakers, a bass-boost circuit is used to reinforce low-frequency sound. However, if the volume is turned up with bass-boost reinforcement, low-frequency sound is easily saturated which results in distortion. As shown in the diagram, the Active Hyper-Bass circuit incorporates a control circuit in which the cut-off frequency of low-frequency sound is varied in the bass-boost circuit, with the cut-off frequency controlled by instructions from a level identification circuit. With these circuits, when the volume increases, low-frequencies are sharply attenuated, which prevents distortion caused by the saturation of low frequencies.



4 Specifications

SPECIFICATIONS

Compact disc player section

Type	: Compact disc player
Signal detection	: Non-contact optical pickup
Number of channels	: 2 channels
Frequency range	: 20 Hz – 20,000 Hz
Dynamic range	: 76 dB
Signal-to-noise ratio	: 76 dB
Total harmonic distortion	: 0.1 %

Wow & flutter : Less than measurable limit

Radio section

Frequency ranges	: FM 87.5 – 108 MHz AM: (MW) 522 – 1,629 kHz (LW) 144 – 288 kHz
Antennas	: Loop antenna for AM (MW/LW) External antenna terminal for FM (75 ohms)

Tape deck section

Track system	: 4-track 2-channel stereo
Motor	: Electronic governor DC motor for capstan
Heads	: Hard permalloy head for recording/playback, 2 gap ferrite head for erasure (Combination head)

Frequency response	: 50 – 15,000 Hz (with metal tape)
Wow and flutter	: 0.16 % (WRMS)
Fast wind time	: Approx. 120 sec (C-60 cassette)

Speaker section (each unit)

Speaker (Impedance)	: 10 cm x 1 (8 Ω)
Dimensions	: 160(W) x 250(H) x 202.5(D) mm
Weight	: Approx. 2.1 kg

General

Power output	: Max. 27 W (13.5 W + 13.5 W) at 8 Ω 19 W (9.5 W + 9.5 W) at 8 Ω (10 % THD)
Output jacks	: Speaker x 2 (matching impedance 8 Ω – 16 Ω) Headphones (0 – 30 mW/32 Ω) (matching impedance 16 Ω – 1 kΩ)
Power supply	: AC 240 V, 50/60 Hz, (UX-A3B) AC 230 V, 50/60 Hz, (UX-A3GI) Ext. DC 12 V (Use the specified specified car adapter (marked available from an audio store))
Power consumption	: 55 W (with POWER SW ON) 4 W (with POWER SW STANDBY)
Dimensions	: 458(W) x 258(H) x 212(D) mm including knobs
Weight	: Approx. 8.7 kg
Accessories provided	: Remote control unit (RM-RXUA3) Battery "R03" x 2 (for the remote control) FM feeder antenna x 1 Loop antenna stand x 1 Speaker cord x 2 Antenna adapter x 1

Design and specifications are subject to change without notice.

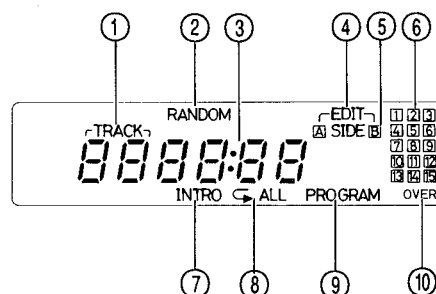
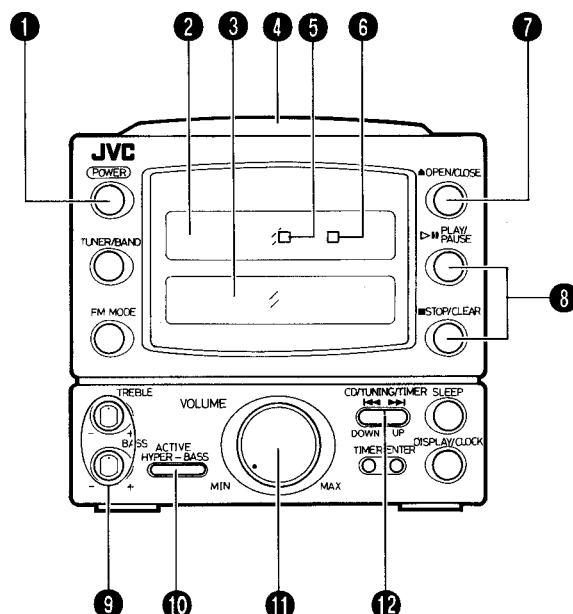
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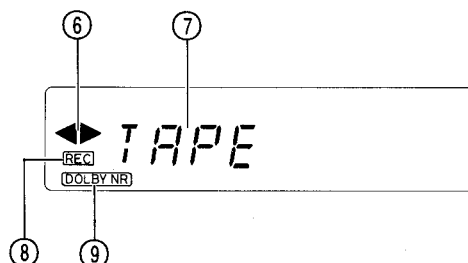
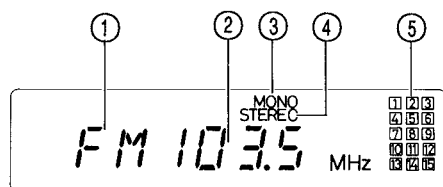
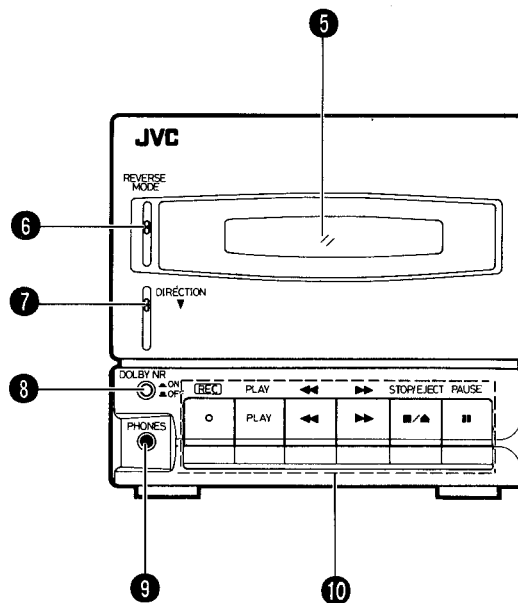
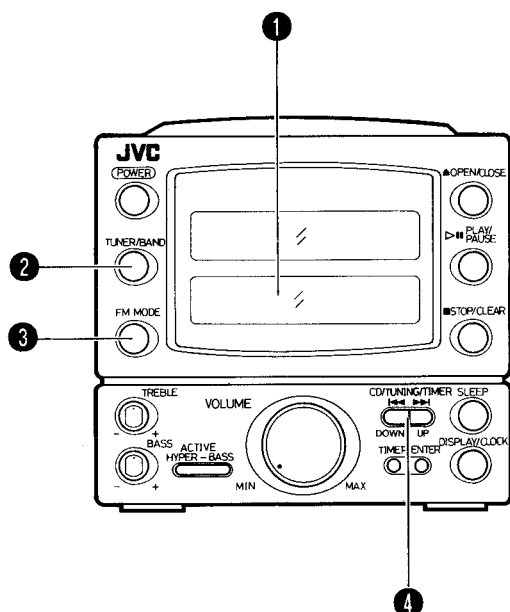
5 Instructions (Extract)

NAMES OF PARTS AND THEIR FUNCTIONS

CD player/General section



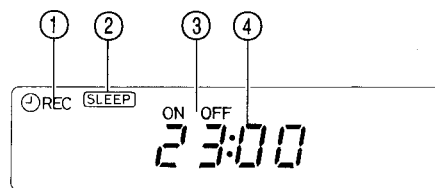
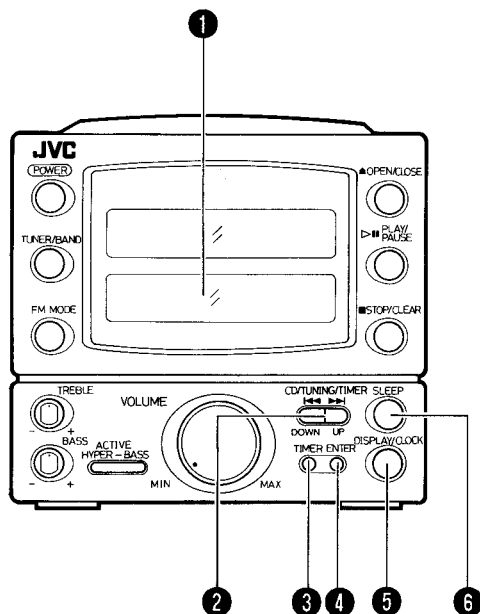
Tuner/Deck section



- 1** Display window
- ① Band indicator (FM/AM (MW/LW))
 - ② Radio frequency display
 - ③ MONO indicator
 - ④ STEREO indicator
 - ⑤ Preset station display
 - ⑥ Tape direction indicator (◀, ▶)
This indicator remains lit even in the CD and tuner modes.
 - ⑦ Tape mode display
 - ⑧ Recording indicator (REC)
 - ⑨ DOLBY NR indicator (DOLBY NR)
- 2** TUNER/BAND button
- Press to select the tuner mode.
 - Press to select the band (FM/AM (MW/LW)).
- 3** FM MODE button
- 4** TUNING button (UP/DOWN)
- 5** Cassette holder
- 6** REVERSE MODE switch
- ↔ : For single-side recording or playback
 - ↕ : For both-sides recording or playback
 - ↻ : For continuous play

- 7** DIRECTION switch
- Press to change the direction of tape travel.
- 8** DOLBY NR button
- Set to ON () when recording or playing back tapes using the noise reduction system.
- 9** PHONES jack (3.5 mm dia. stereo mini plug)
- Connect headphones (impedance 16 Ω - 1 kΩ) to this jack. The speakers are automatically switched off when headphones are connected.
- 10** Cassette operation buttons
- REC : Press this button with the PLAY button to start recording.
 - PLAY : Press to play the tape.
 - ◀◀ : Press to fast wind the tape from right to left.
 - ▶▶ : Press to fast wind the tape from left to right.
 - /▲ STOP/EJECT: Press to stop the tape. Pressing this button after the tape stops opens the cassette holder.
 - || PAUSE : Press to stop the tape temporarily. Press again to release the pause mode.

Timer/Clock section



- ① Display window
 - ① Timer mode indicator
 - ② SLEEP indicator
 - ③ Timer indicator (ON/OFF)
 - ④ Time display
- ② TIMER buttons (UP/DOWN)
 - Set the time or timer setting.
- ③ TIMER button
 - Set the timer setting or timer ON/OFF (to reset or cancel the timer).

- ④ ENTER button
 - Register the time or timer setting.
- ⑤ DISPLAY/CLOCK button
 - Set the time and current time displays.
- ⑥ SLEEP button

REMOTE CONTROL UNIT

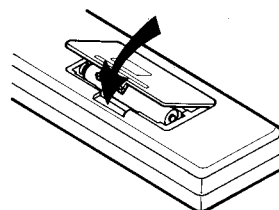
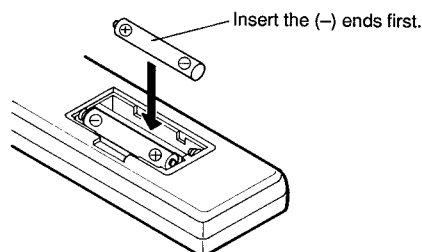
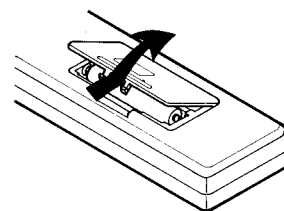
Preparation before use

- **Installing batteries in the remote control unit**
 1. Remove the battery cover from the back of the remote control unit.
 2. Insert two "R03" size batteries.
 3. Insert the batteries with the (+) and (-) terminals matching the indication inside the battery compartment.
 3. Replace the cover.
- **Battery replacement**
 - When the remote control operation becomes unstable or the distance from which remote control is possible becomes shorter, replace the batteries with new ones.

Using the remote control unit

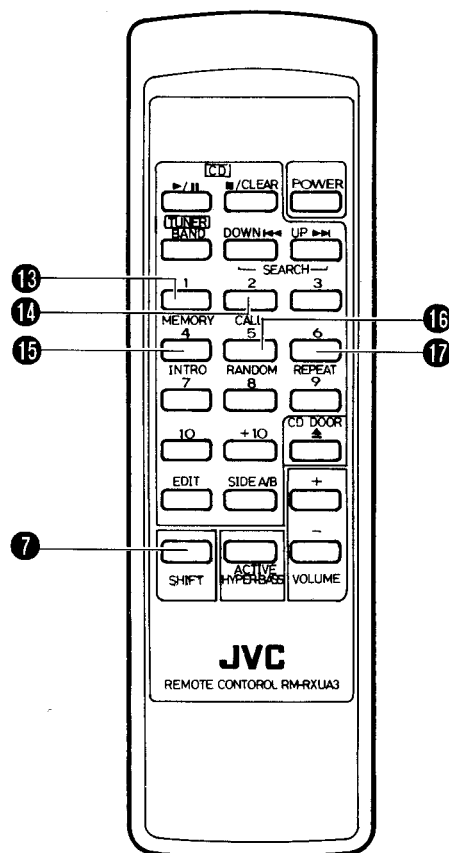
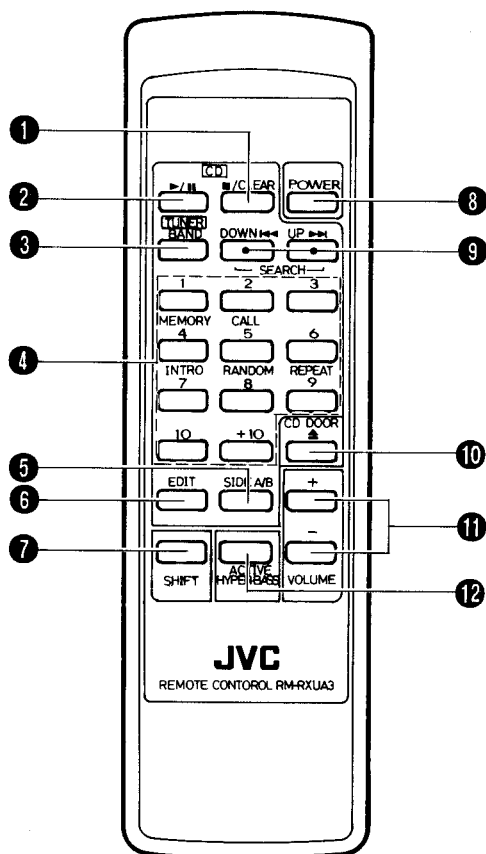
To use the remote control unit, point it at the REMOTE SENSOR and press the buttons gently and firmly. Remote control operation is possible within about 7 m (approx. 23 ft). However, since the remote control range is less when the unit is used at an angle, use directly in front of the REMOTE SENSOR, as far much possible.

Do not expose the REMOTE SENSOR to strong light (direct sunlight or artificial lighting) and make sure that there are no obstacles between the REMOTE SENSOR and the remote control unit.



The following operations can be performed using the remote control unit.

- Check the functions of the operation buttons carefully and operate them correctly.



- ❶ ■/CLEAR: Stop/clear button
- ❷ CD ▶/||: CD mode/play/pause button
- ❸ TUNER/BAND button
- ❹ Track (tune) number buttons (No. 1 - No. 10, +10)
- ❺ Preset station buttons (No. 1 - No. 10, +10)
- ❻ SIDE A/B button
- ❼ EDIT button
- ❼ SHIFT button
- ❽ POWER button
- ❾ CD search/DOWN and UP button (◀▶)
 - In the CD mode, to scan to the beginning of a tune and to start forward or reverse search.
 - In the tuner mode, to tune to broadcasts. (Also used to set the time and timer.)
- ❿ CD DOOR button (▲)
- ⓫ VOLUME buttons
 - + : Use to increase the volume.
 - : Use to decrease the volume.
- ⓬ ACTIVE HYPER-BASS button
- ⓭ MEMORY button
- ⓮ CALL button
- ⓯ INTRO button
- ⓰ RANDOM button
- ⓱ REPEAT button

Press this button while the SHIFT button ❷ is pressed.

Playing an entire disc ... The following example assumes a compact disc with 12 tunes and a total playing time of 48 minutes 57 seconds.

Operate in the order shown

- ① Set to on.
- ② Set to the CD mode.
 - If the PLAY button of the deck is pressed, press the STOP/EJECT (■/▲) button to set to the stop mode.
 - When a CD is first loaded, the total number of tracks (tunes) and total playing time are displayed.
- ③ Press to open the CD door.
- ④ Load a disc with the label side facing up. Press to close the CD door. (The door can be closed by pressing the ►|| button.)
- ⑤ Press to start play.
 - As tunes are played, their track numbers go out one by one.

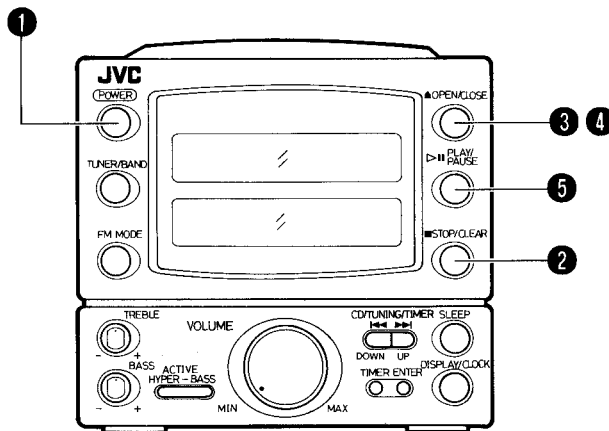
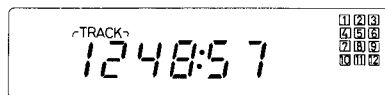
Note:

When the CD door is closed by pressing the ►|| button, the CD starts as soon as the CD door is closed.

To stop play

- **To stop in the middle of a disc**
During playback, press the STOP/CLEAR button to stop play.

■STOP/CLEAR



- The total number of tracks (tunes) and total playing time are displayed.

To stop a disc temporarily

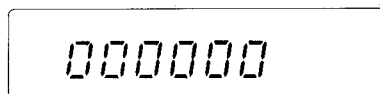
Press the PLAY/PAUSE button to stop play temporarily. When pressed again, play resumes from the point where it was paused.

Cautions:

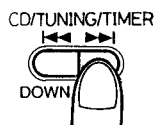
- To change discs, press the STOP/CLEAR button; check that the disc has stopped rotating completely before unloading it.
- Since the disc cannot be unloaded when the power is set to STANDBY, switch the power on and press the OPEN/CLOSE button to unload the disc.

Notes:

- The following indication may be shown when a disc is dirty or scratched, or when the disc is loaded upside down.
In such a case, check the disc and insert again after cleaning the disc or turning it over.



- Do not use the unit at excessive high or cold temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- After playback, unload the disc and close the CD door.
- If mistracking occurs during play, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i.e. in a car travelling on a rough road).

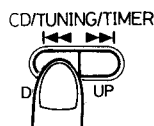


Skip playback

- During playback, it is possible to skip forward to the beginning of the next tune or back to the beginning of the tune being played or the previous tune; when the beginning of the required tune has been located, play starts automatically.

To listen to the next tune ...

Press the ►► button once to skip to the beginning of the next tune.

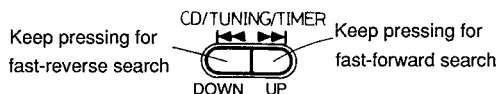


To listen to the previous tune ...

Press the ◄◄ button to skip to the beginning of the tune being played back and press again to skip to the beginning of the previous tune.

Search playback (to locate the required position on the disc)

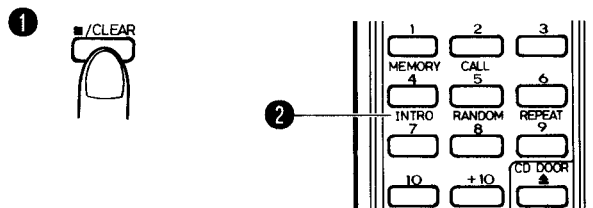
- The required position can be located using fast-forward or reverse search while playing a disc.



- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

Direct access playback (using the remote control)

- Pressing any of the track number buttons will start play from the beginning of the designated tune, without your having to press the CD ►/■ button. (This function cannot be used during programmed play.)



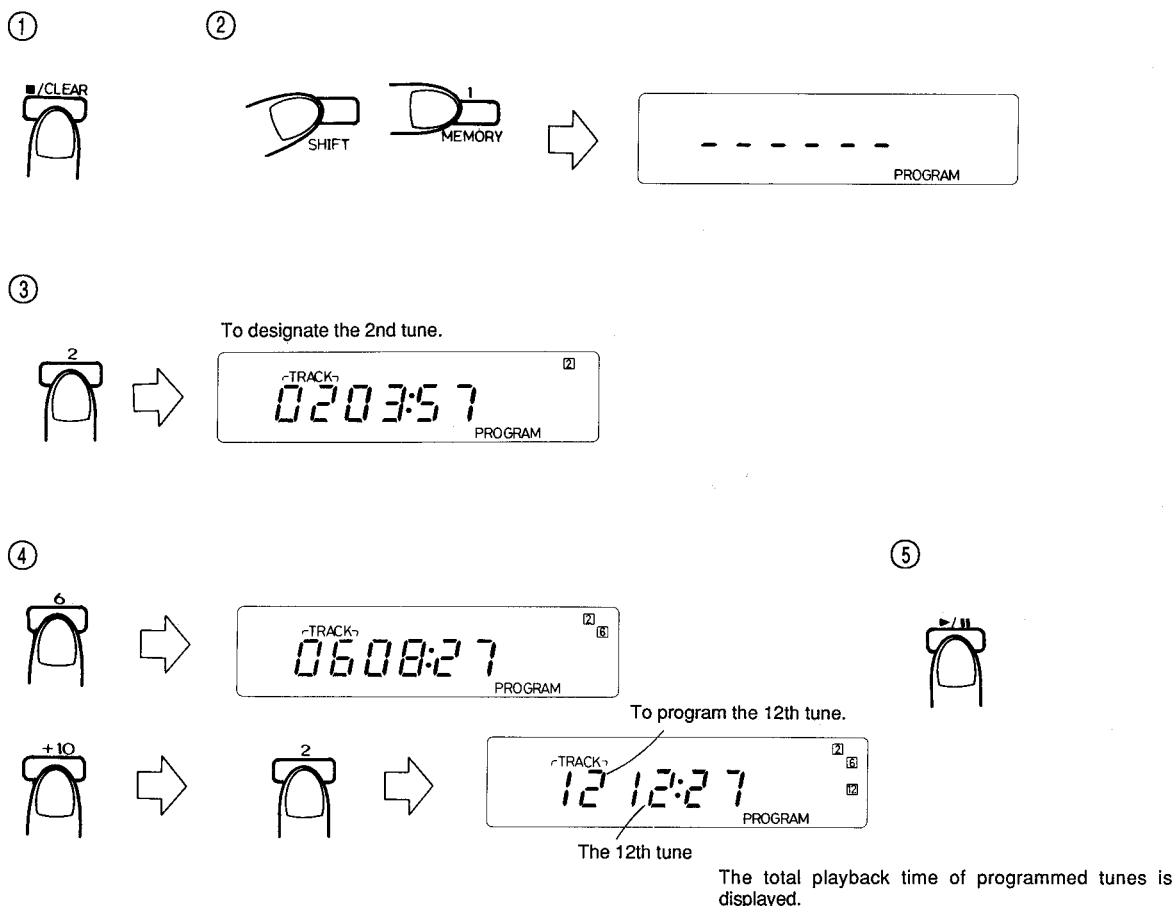
- 1 Press the ■/CLEAR button to set to the CD mode.
 - If the PLAY button of the deck is pressed, press the STOP/EJECT (■/▲) button to set to the stop mode.
 - 2 Designate the required tune using the track number buttons.
 - To designate tune numbers 1 to 10, press the track number button corresponding to the tune (track) number.
 - To designate tune number 11 or higher, press the +10 button the required number of times, then the track number button. (Example: To designate the 25th tune, press the +10 button twice, then press track number button 5.)
- * +10 button:**
Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the track number button to set the 1's digit.
- **To skip to another tune during play**
When the required track number button is pressed, the display shows the designated track number and play starts from the beginning of the designated tune.

Programmed play (using the remote control)

- Up to 20 tunes can be programmed to be played in any required order.

The total playing time of programmed tunes is displayed (up to 99 minutes, 59 seconds).

(Example: When programming the 2nd tune to be played first, the 6th tune next, and then the 12th tune, etc.)



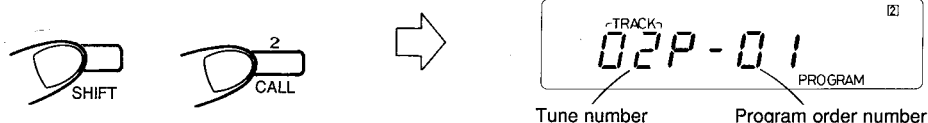
- Press the **■/CLEAR** button.
- Press the **MEMORY** button while pressing the **SHIFT** button to set to the programming mode.
- Press to designate the required track number.
- Designate the remaining tunes by pressing the track number buttons.
- Press the **▶/||** button when programming is completed. Programmed playback starts.

To clear the programmed tunes ...

Press the **■/CLEAR** button before playing a disc. During programmed playback, press this button twice. When the CD door is opened, programmed tunes are cleared automatically.

To confirm the details of a program...

Press the CALL button while pressing the SHIFT button; the tunes making up the program will be displayed in programmed order.

**Notes:**

1. If the total playing time of the programmed tunes exceeds 99 minutes 59 seconds, the total playing time indication will go out.
2. Programming 21 or more tunes is impossible.
3. When a disc with 16 or more tunes is loaded, the "OVER" indicator will appear.
4. When performing timer playback in the order of "Programmed play", step ⑤ above is not required.

Repeat play (using the remote control)

Press the REPEAT button while pressing the SHIFT button before or during play. A single tune or all the tunes can be repeated.

Whether a single tune or all tunes are to be repeated can be specified. Each time the REPEAT button is pressed while pressing the SHIFT button, the mode will change from a single tune (), to all the tunes (), to the clear mode, in this order.



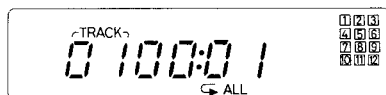
- **Repeat playback of a single tune ()**

The tune being played back will be heard repeatedly.

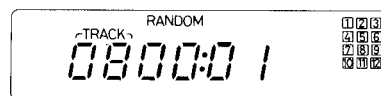


- **Repeat playback of all tunes (ALL)**

When playing back an entire disc or programmed tunes, all tunes or the programmed tunes will be heard repeatedly.

**Random playback (using the remote control)**

Press the RANDOM button while pressing the SHIFT button, all tunes on a disc are played once, in random order.

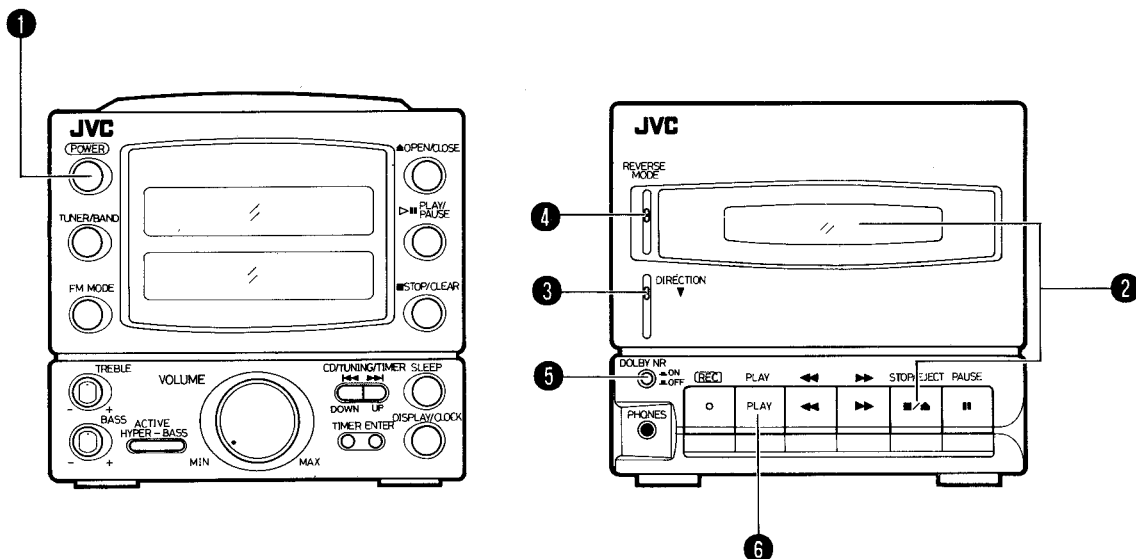
**INTRO scan operation (using the remote control)**

- Simply press the INTRO scan button while pressing the SHIFT button to play the first 15 seconds of each tune. The operation is released after playing the introductions of all tunes or all programmed tunes.
- If the INTRO scan button is pressed in the middle of a tune while pressing the SHIFT button, the intro scan operation will start from the next tune.
- To release the intro scan mode, press the INTRO scan button again while pressing the SHIFT button and normal playback (or programmed playback) will resume.



CASSETTE PLAYBACK

Operate in the order shown

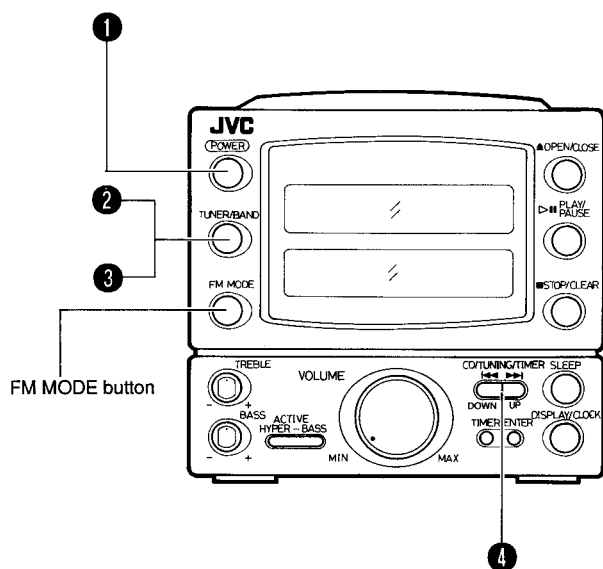


- 1 Set to on.
- 2 Load a cassette with side A facing out.
- 3 Select the direction of tape travel
- 4 Select the reverse mode (\rightleftarrows / \rightarrow / \leftarrow).
- 5 Set the DOLBY NR switch as required.
- 6 Press to start playback.

- When the tape is played back with the reverse mode set to the \rightleftarrows (single side play) or \rightarrow (both side play) mode, the tape stops automatically at the end of tape after playing one side or both sides.

RADIO RECEPTION

Operate in the order shown



- 1 Set to on.
- 2 Press the TUNER/BAND button; a band and radio frequency will be shown in the display.
 - If the PLAY button of the deck is pressed, press the STOP/EJECT ($\blacksquare/\blacktriangle$) to set to the stop mode.
- 3 Select the band (FM or AM (MW/LW)).
- 4 Tune to the required station.

FM MODE button

AUTO:

Set to this position when listening to or recording an FM stereo broadcast. The stereo indicator lights when the FM stereo broadcast is received.

MONO:

Set to this position when FM stereo reception is noisy.

• Seek tuning

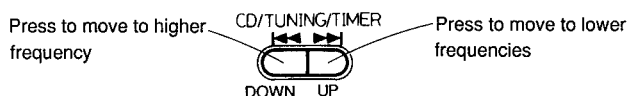
Press the UP or DOWN button for one second or more; the unit enters the seek tuning mode and tunes to higher or lower frequencies, and when the broadcast is received, it stops tuning automatically and the broadcast can be heard.

In AM operation, the frequency moves continuously from the MW to the LW band and vice versa.

• Manual tuning

Each time the UP or DOWN button is pressed, the unit steps through the current frequency band. Tuning is in steps of 50 kHz for FM and 9 kHz for AM (MW/LW).

In AM operation, the frequency moves continuously from the MW (522 - 1,629 kHz) to the LW (144 - 288 kHz) band and vice versa.



Notes:

- When seek tuning to the required station is not possible because it is broadcasting too weak a signal, press the UP or DOWN button momentarily to perform manual tuning.
- When the power is set to STANDBY, or another mode (TAPE or CD) is selected, the last tuned frequency is stored in memory. When the power is switched on again and TUNER/BAND button is pressed, the same station will be heard.

Using the antennas

FM: Connect the provided FM feeder antenna (see page 8).

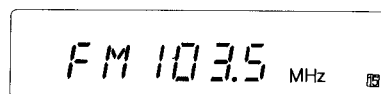
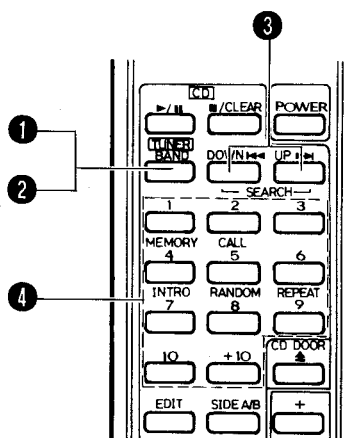
AM (MW/LW): Adjust the position of AM (MW/LW) loop antenna.

Presetting stations

(using the remote control unit)

15 stations in each band (FM and AM (MW/LW)) can be preset as follows:

- Example (when presetting an FM station broadcasting at 103.5 MHz to preset button "15")



- 1 Press the TUNER/BAND button.
 - 2 Select the FM band using the TUNER/BAND button.
 - 3 Tune to the required station.
 - 4 Press preset button "+10", then "5" for more than 2 sec. (When "15" blinks in the preset station display, the station has been preset.)
- Repeat the above procedure for each of the other stations, using a different preset button each time..
 - Repeat the above procedure for the AM (MW/LW) band.

RECORDING

- In recording, the ALC circuit automatically optimizes the recording level; adjustment of the recording level is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

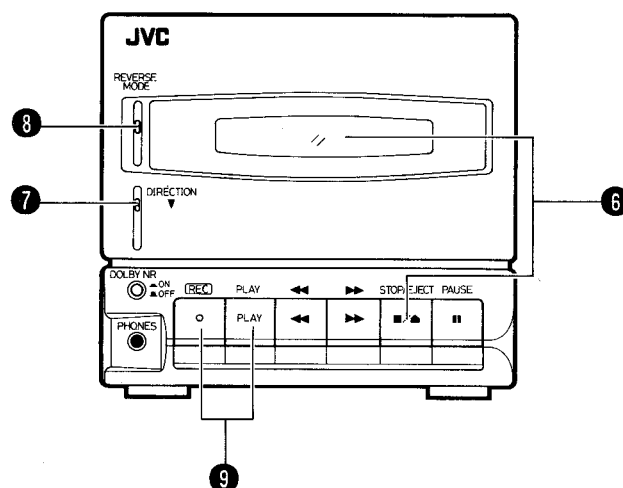
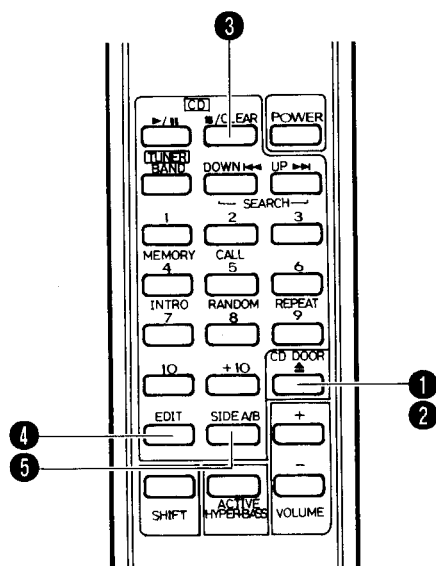
Notes:

This unit has recording characteristics suitable for normal and CrO₂ tapes. Normal and CrO₂ tapes have different characteristics from metal tape.

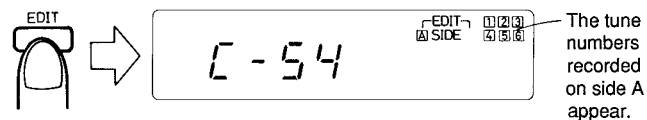
CD edit recording (for CDs with up to 99 tunes)

- By checking the total playing time of the CD, a microcomputer in the unit automatically calculates the optimum length (recording time) of the tape to be used, displays the required tape length, and divides the tunes on the disc into two groups to be recorded on the two sides of the tape so as to minimize tape waste.

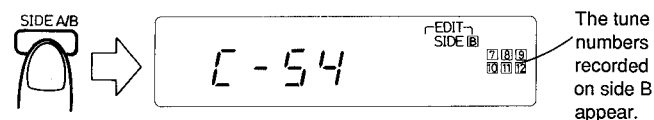
Operate in the order shown



- 1 Press to open the CD door.
- 2 Load a disc and press to close the CD door.
- 3 Set to the CD mode.
 - If the PLAY button of the deck is pressed, press the STOP/EJECT (■/▲) button to set to the stop mode.
- 4 Press the EDIT button once.



- 5 Press the SIDE A/B button.



- 6 Insert a cassette with a suitable length (recording time) with side A facing out.
 - The tape length can be set from the remote control. (See below.)
- 7 Set to the forward direction. (The ► indicator lights.)
- 8 Set to ◀ mode.
- 9 Check that the pause button of the deck has been released, then press the (●) REC button and the PLAY button to start CD edit recording.
 - During edit recording, the leader tape section (approx first 12 sec.) is wound automatically and then recording starts.

- Engage the recording mode until the end of tape of side B is reached after the CD has finished.

- **To change the tape length (recording time)**
When the EDIT button is pressed with a CD loaded, the tape length required to record the entire disc is displayed (C-46, C-54, C-60, C-74 or C-90). At this time, the displayed tape length can be changed by pressing the track number buttons.

Example: To change to C-50

Press the +10 button four times, and within 10 seconds, press the 10 button.

When the length of the tape is changed, some of the tunes that were to be recorded on side A may be indicated as to be recorded on side B or vice versa, according to the tape length specified.

Depending on the tape length specified, some tunes may not be recorded on the tape. Set the tape length (recording time) so that the entire disc can be recorded.

- **When editing a disc with 16 to 99 tunes**

CD editing can be used to record discs containing up to 99 tunes, however, the music calendar shows up to only 15 tunes.

As the 16th to 99th tunes will not appear in the program chart display (the "OVER" indicator will light), be sure to check the tunes you have recorded after completing editing.

While recording, the track number of the tune being played (and recorded) appears in the display for confirmation.

- **Set the DOLBY NR as required. The DOLBY NR indicator lights.**

Note:

The optimum sound quality will not be obtained if different DOLBY NR switch settings are used during recording and playback.

Note:

- In CD edit recording, blanks of approx. 4 seconds will automatically be left between tunes on the recorded tape.

When automatic spacing between tunes is not required ...

Perform the following:

1. Press the ▷/|| PLAY/PAUSE button of the CD player twice. The CD player enters the pause mode.
2. Press the ○ REC button with the PLAY button to start recording.

Note:

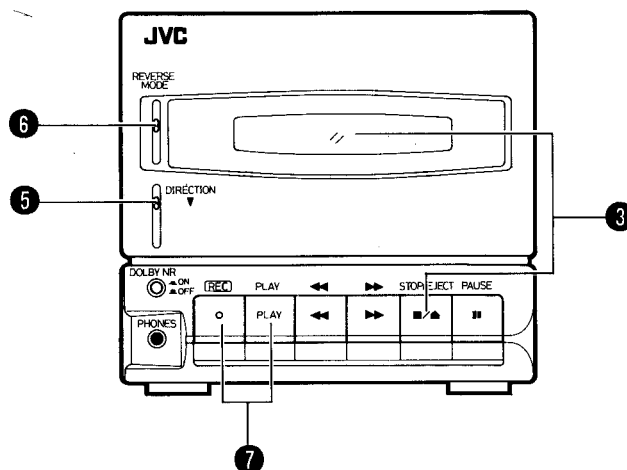
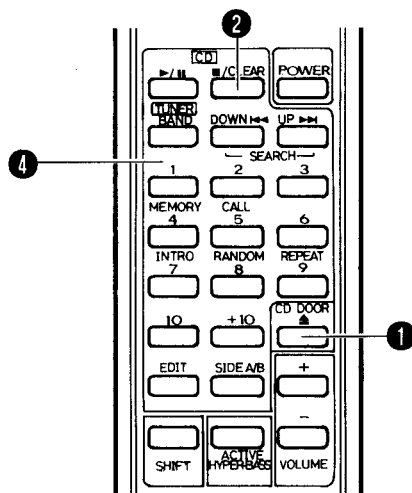
- Depending on the disc used, blanks of a specified length may be left between tunes.

- **After use**

Press the STOP/EJECT (■/▲) button to release the CD edit recording mode. (The CD edit recording mode is also released when the CD door is opened.)

Synchronized recording with the CD player

- In this system, the CD player starts playback when the cassette deck enters the recording mode.

Operate in the order shown

- 1 Load a disc and close the CD door.
- 2 Set to the CD mode.
 - If the PLAY button of the deck is pressed, press the STOP/EJECT (■/▲) button to set to the stop mode.
- 3 Load a cassette with side A facing out. (Wind past the leader tape before starting recording.)
- 4 When programmed playback is required, program the required tunes using the remote control. (See page 27.)
 - Select tunes with a total playing time which does not exceed the tape length.

- 5 Set to the forward direction. (The ► indicator lights.)
- 6 Select the required reverse mode (◄ or ►).
- 7 Press the ○ REC button with the PLAY button; synchronized recording will start.

- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
- To stop recording in the middle of a tape, press the STOP/EJECT (■/▲) button of the cassette deck.

• **CD complete recording function (synchro recording mode only)**

If the tape is reversed while a CD is being played, recording will be done on the reverse side of the tape as follows:

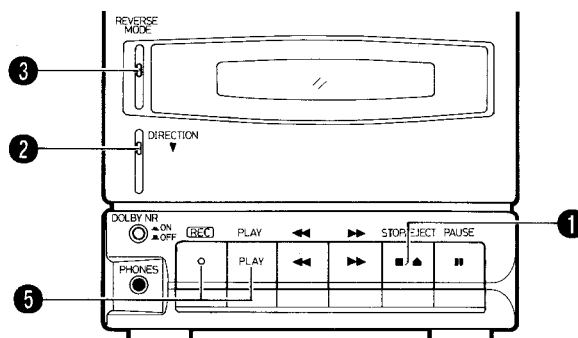
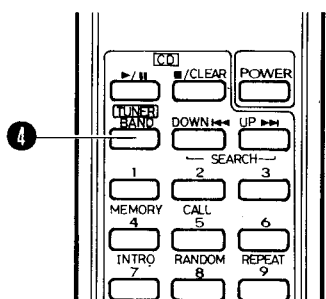
- * When less than 10 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the previous tune.
- * When more than 10 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the current tune.

Note:

- During CD edit recording and synchro recording, the SEARCH button do not function.

Recording from the radio

Operate in the order shown



- 1 Load a cassette with side A facing out.
(Wind past the leader tape before starting recording.)
 - 2 Set to the forward direction. (The ► indicator lights.)
 - 3 Select the required reverse mode (↔ or ⇄).
 - 4 Press the TUNER/BAND button. Tune to the required station.
 - 5 Press the ○ REC button with the PLAY button.
 - The function switch is locked and its position cannot be changed.
- To stop recording temporarily, press the ■ PAUSE button. To resume recording, press the ■ PAUSE button again.

Note:

The CD door cannot be opened or closed during radio recording.

Erasing

When recording on a pre-recorded tape, the previous recording is automatically erased and only the new material can be heard when the tape is played.

To erase a tape without making a new recording...

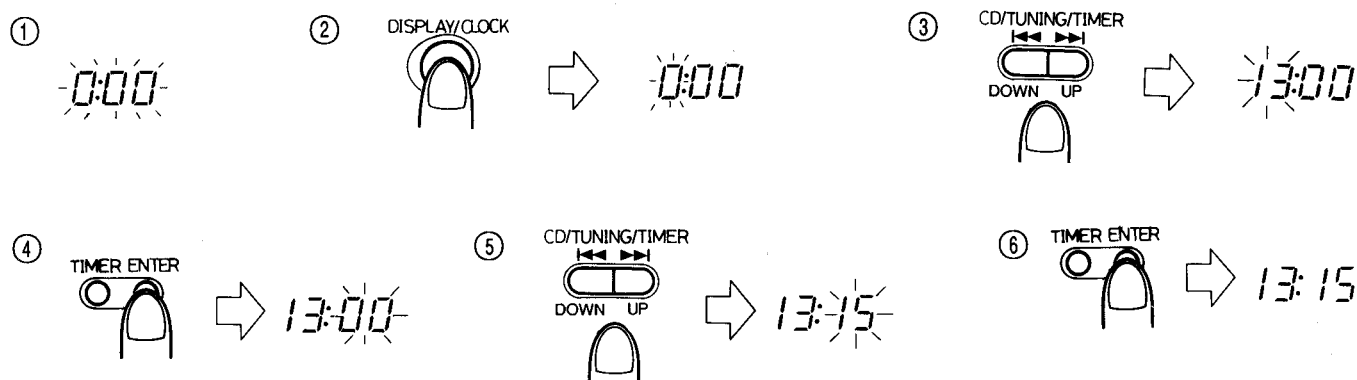
Press the PLAY button of the deck to set to the TAPE mode and press the ○ REC and PLAY buttons together after pressing the stop button.

It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.

CLOCK ADJUSTMENT

Setting the current time (when the UX-A3 is used for the first time)

(Example: to set the clock to 13:15.)



- ① Connect the AC power cord; "0:00" will blink in the display.
 - Set to the standby mode; do not press the POWER button.
 - ② Press the DISPLAY/CLOCK button for 2 sec. or more: the hour's digits will blink.
 - ③ Set to 13:00 by pressing the TIMER buttons (UP/DOWN).
 - ④ Press the ENTER button; the minute's digits will blink.
 - ⑤ Set to 13:15 by pressing the TIMER buttons (UP/DOWN).
 - ⑥ Press the ENTER button; the time will light continuously in the display.
- To set to the nearest second...
Press the ENTER button when you hear the time signal from a TV or radio.

Notes:

- Before performing timer recording or playback, it is necessary to set the current time.
- It is recommended to set the current time with the power switch set to STANDBY so that the current display mode is maintained.
- When the power cord is plugged in again after being disconnected or power is restored after a power failure, clock display will blink or light in the display. Set the current time again.
- Press the DISPLAY/CLOCK to display the current time during CD play, tape play or radio reception. The current time will be displayed for 10 sec. after which the display returns to the previous mode.

TIMER OPERATIONS

Timer recording

- The current time must be set correctly before you set timer recording.
- Make sure that the erase protection tabs of the cassette have not been broken off.

Operations

1. Set the POWER button to ON.
2. Load a cassette.
 - Insert the cassette with the side to be recorded facing out.
 - Set the DIRECTION switch to the forward direction. (The ► indicator lights.)
 - Set the reverse mode button to "↺" or "↻" and set the DOLBY NR button as required.
3. Set the timer start and stop times, then set the required volume, in this order. (Refer to "Setting the timer" on page 47.)
 - Set the timer about a minute before the broadcast to be recorded is scheduled to start.
4. Press the TUNER/BAND button.
 - Tune to the station to be recorded. (Refer to page 33.)
5. Set the POWER button to STANDBY.

6. Press the O REC and PLAY buttons of deck simultaneously
 - If the DIRECTION switch is pressed before the (O) REC and PLAY buttons are pressed, the (O) REC and PLAY buttons cannot be pressed.

Note:

Timer recording will start at the preset time, the power will not be switched off at the timer-off time during tape operation, but it will be switched off when the tape ends. However, the power cannot be switched off when the reverse mode is set to "↺" or the deck is set to the pause mode.

- When timer recording is completed, the timer mode is switched to the "TUNER" (timer reception of broadcast) mode.

• To cancel timer operation

Press the TIMER button so that the timer mode indicator (⊕) goes out.

If you do this, timer recording will not start at the timer start time.

Notes:

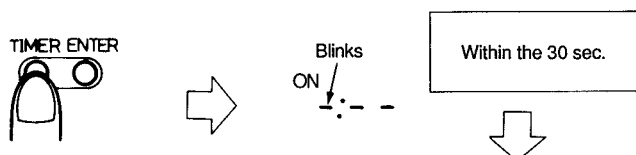
Once the timer has been set, the start and stop times, etc., are stored in memory. When timer recording or playback is required at different times, the timer must be set again.

- After setting the timer start and stop times, check that the unit is tuned to the required frequency.
- When the power cord is disconnected or there is a power failure, timer settings will be erased from memory. If this happens, set the current time and perform the timer setting again.

Setting the timer

- The current time must be set before the timer can be used.

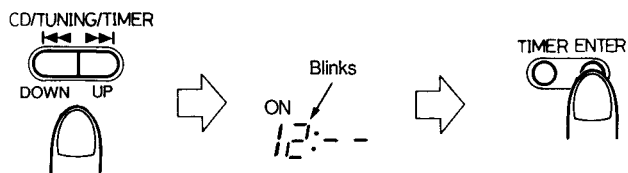
1 Press the TIMER button.



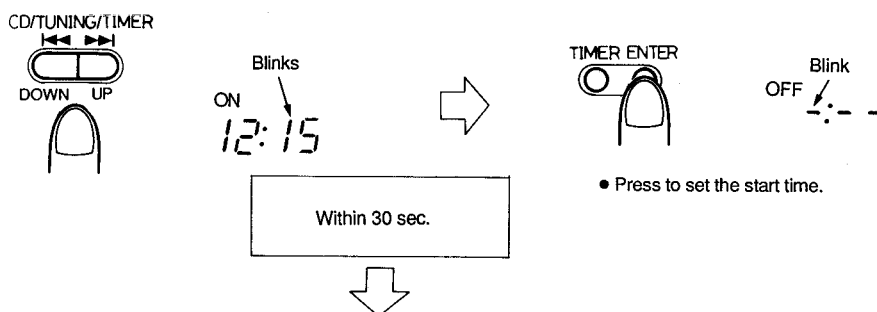
2 Set the start time.

(Example: when the timer start time is set to 12:15)

① Adjust the hours.



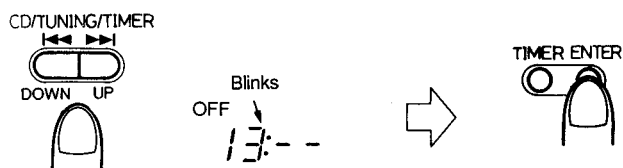
② Adjust the minutes.



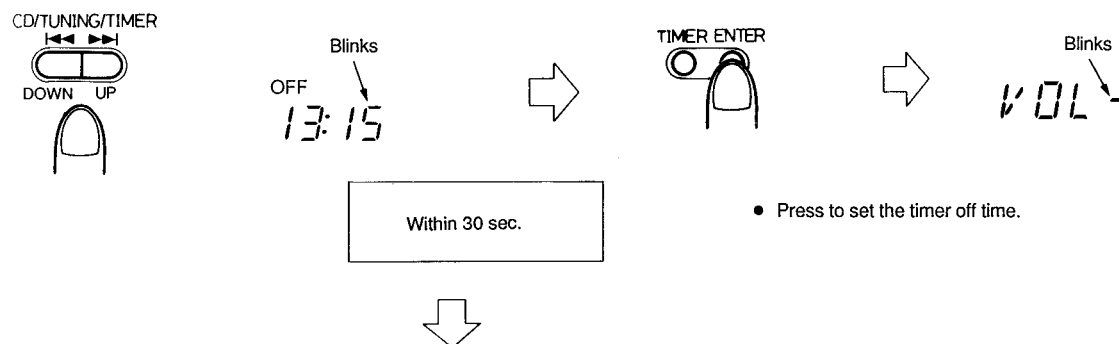
3 Set the stop time

(Example: when the timer stop time is set to 13:15.)

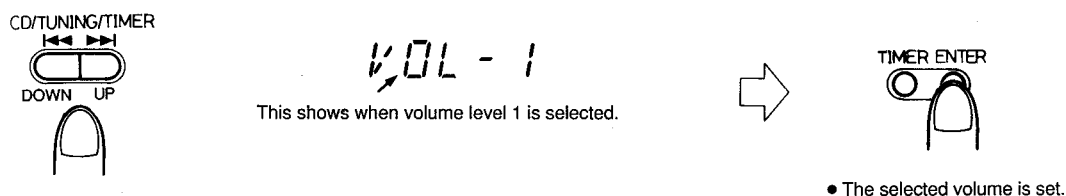
① Adjust the hours.



② Adjust the minutes.

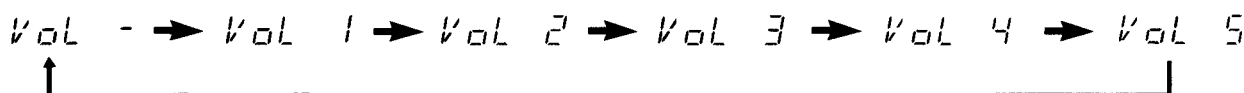


④ Set the volume.



The playback level is determined by the position of VOLUME control.

When the UP button is used to select the volume.



The volume decreases to zero at the timer start time, and the sound fades in. (Volume level 5 is approximately the same as when the VOLUME control is set to its center position.)

- The unit enters the previously engaged mode and timer setting is complete.

- **To check the timer setting**

1. Press the TIMER button.
2. Press the ENTER button to check the timer mode.
3. When the previously engaged mode is displayed, timer setting has been completed.

Notes:

- When the timer is set incorrectly, perform "Setting the timer" from the beginning.
- When the timer is set, ":-:" in the display is replaced by the input digits.
- When the timer stop time is not set, the timer operates for 2 hours and then the unit is switched off. When the timer is already set, display the timer stop time, change the hours digits to ":-:" using the UP button and press the ENTER button.

Timer playback

- Timer playback of tapes, broadcasts and CDs is possible.

Operations

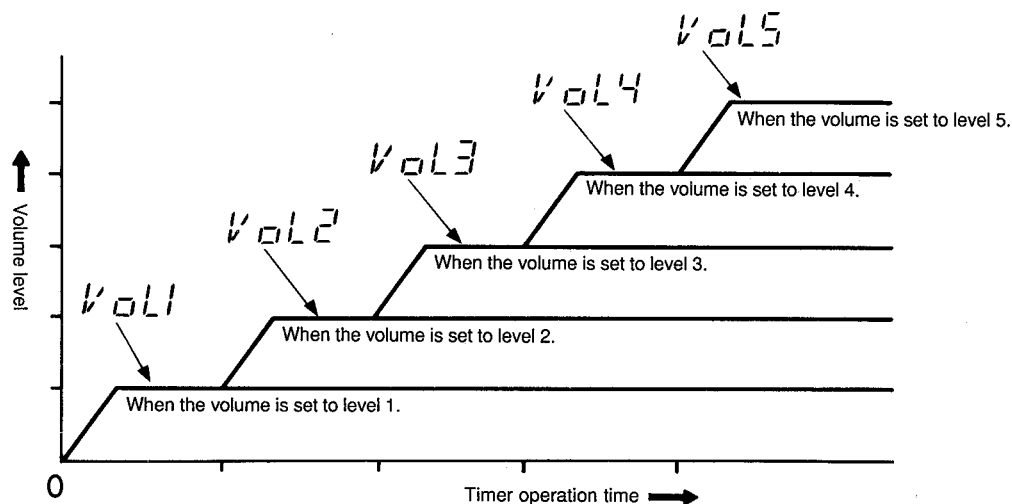
- 1 Set the POWER switch to ON.
- 2 Set the timer start and stop times, then set the volume, in this order. (Refer to "Setting the timer" on page 47.)
- 3 Select the source sound.

Source sound	Timer mode	Operations
CD play	CD	Load a disc and press the ■ STOP/CLEAR button to set the CD mode.
Tape playback	TAPE	Load a cassette tape and select the tape travel direction.
Radio broadcast	TUNER	Press the TUNER/BAND button to set to the tuner mode and tune to the required frequency.

- Timer playback of a CD is possible in programmed order. (See page 27.)
- The volume can be set to 5 different levels.
- Tune to the required frequency when the timer playback of a broadcast is to be performed.

- 4 Switch the power off.
(When performing the timer playback of tape, press the PLAY button of the deck. Do not press the DIRECTION switch before pressing the PLAY button.)
- Timer playback will start at the timer start time and the power will be switched off at the timer stop time. (Tuner or CD)
The power will not be switched off at the specified time during tape operation and will switched off at the tape end. However, the power will not be switched off when the reverse mode is set to " " or the deck is set to the pause mode.
The unit remains in the same timer mode even after the power is switched off and the same timer function will be repeated at the same time on the following day.

- Volume setting and fade-in operation



- When the power is switched on, it is possible to fade in the sound from volume level 0 (zero) to the preset volume.
- **To cancel timer operation**
Press the TIMER button so that the timer mode indicator (⌚) disappears. (To set to the timer mode again, press the TIMER button twice so that the timer mode indicator (⌚) appears.)

Notes:

- When the volume setting is set to "VoL -" (volume level is not specified), the timer playback volume is set to that of before setting the timer.
- To stop during timer playback, press the POWER button to switch the unit off.
- In the fade-in mode, the volume gradually increases from zero.

SLEEP OPERATIONS

Use this when you want to fall asleep while listening to a tape, radio broadcast or CD.

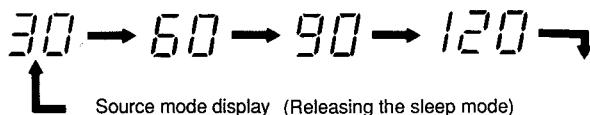
- ① Set to the required source

	Operations
Radio broadcast	Press the TUNER/BAND button to set to the tuner mode and tune to the required frequency.
CD play	Load a disc and press the ► button to play the disc.
Tape playback	Load a cassette and press the PLAY button to play back the tape.

- ② Press the SLEEP button to set to the sleep time.



SLEEP is shown in the display



- Sleep times of 30, 60, 90 or 120 minutes can be set. When you release the SLEEP button, the source is displayed after 10 sec.

- The sleep operation will start and the power will be switched off after the specified time. (Tuner & CD modes)

The power will not be switched off at the specified time during tape operation and will switched off at the tape end. However, the power will not be switched off when the reverse mode is set to "↺" or the deck is set to the pause mode.

- **Checking the sleep time**

When the SLEEP button is pressed, the remaining sleep time is displayed. If it is pressed again, a new sleep time can be set.

- **To cancel the sleep operation**

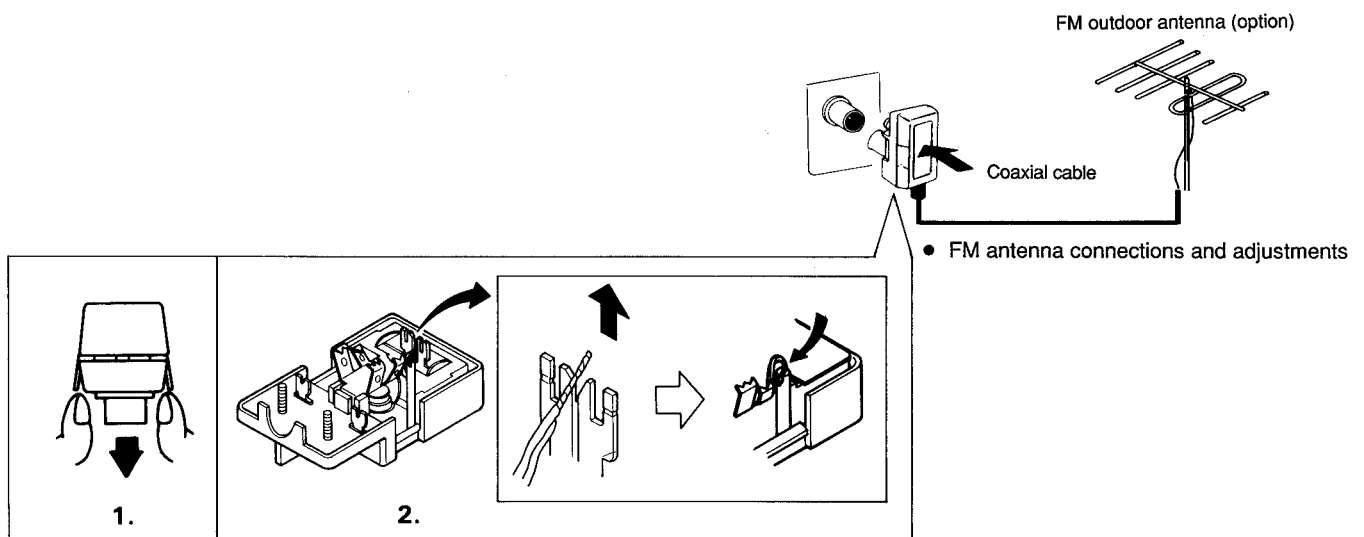
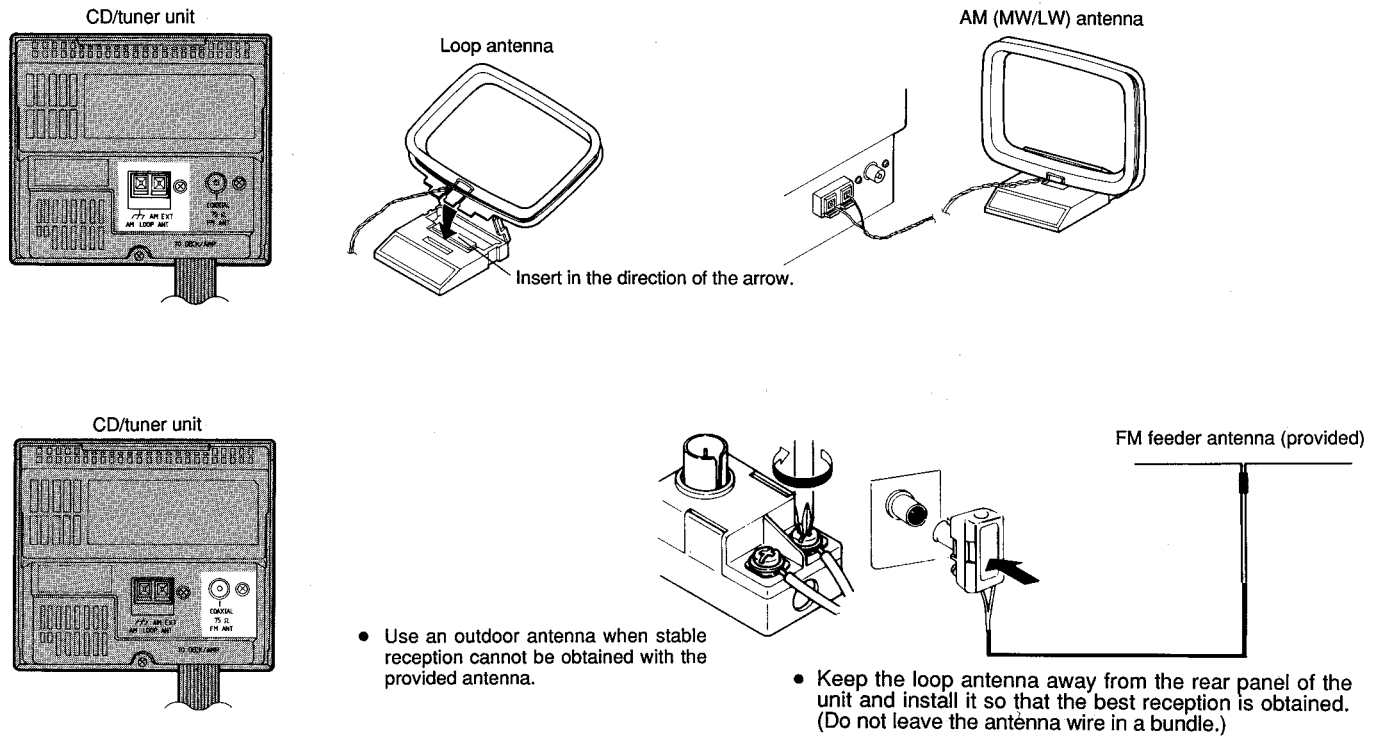
Press the POWER button to switch the power off.

CONNECTIONS

- Do not switch the power on until all connections are complete.

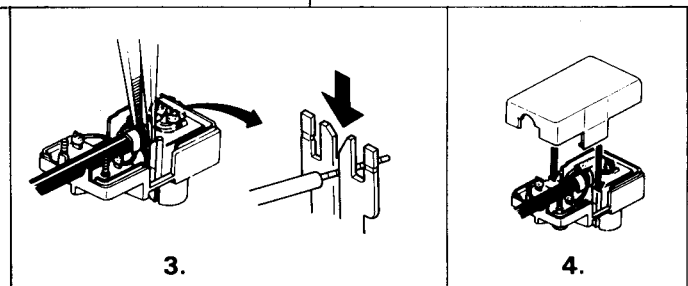
Antenna connection and adjustment

- AM (MW/LW) loop antenna adjustment



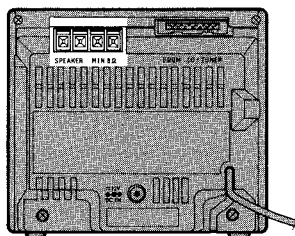
Notes:

- Do not place the loop antenna on a metal desk or near a TV or personal computer.
- Installing an outdoor antenna requires experience; we recommend that you consult an audio dealer.
- Install the antenna cord away from the power and speaker cords as these could generate noise. Install the loop antenna so that it does not touch the rear of the unit.

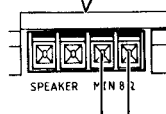
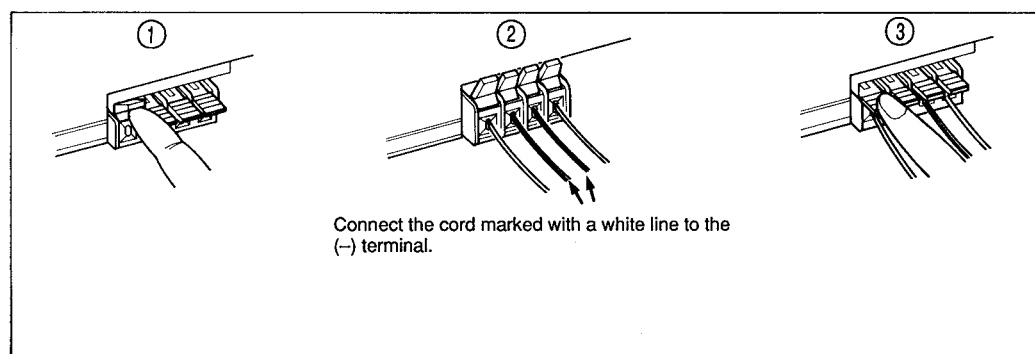


Speaker cord connection

- Use the speaker cords provided to connect the deck/amp and speakers.

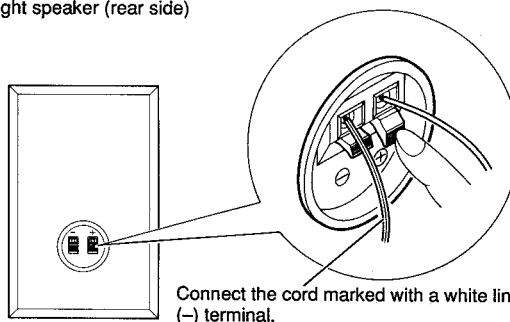


Deck/amp unit



Right speaker (rear side)

Left speaker (rear side)

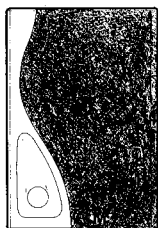


Speaker cord provided

- Connect the cord from the speaker on the left to the (L) terminals and the cord from the speaker on the right to the (R) terminals.

- The speaker grilles can be removed.
 - When removing (the example shows the left speaker).
 - ① Insert your fingers at the top and pull towards you.
 - ② Also pull the bottom towards you.

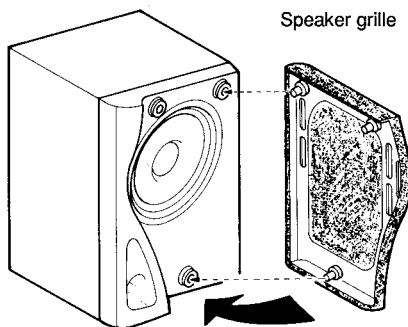
Left speaker



- Attaching the speaker grille

Left speaker

Speaker grille



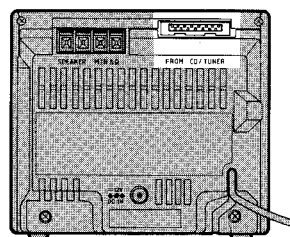
Match the fittings when attaching the grille.

Notes:

- The polarity with which the two speakers are connected will be the same if the speaker cords marked with a white line are connected to the (-) terminals. If the speakers are connected with reverse polarity, the stereo effect and tone will be degraded.
- The speakers of this unit are not magnetically shielded. When they are placed directly on or adjacent to a TV, the TV's color could be distorted. Install the speakers more than 10 cm away from your TV.
- If the speakers are to be placed away from the main unit, purchase optional speaker cords from an audio store.

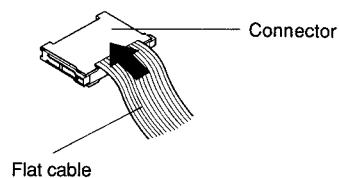
System connection

- Connect the flat cable connected to CD/tuner unit to the deck/amp unit.

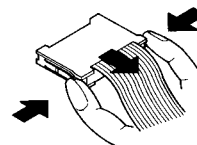


Deck/amp unit

- When connecting



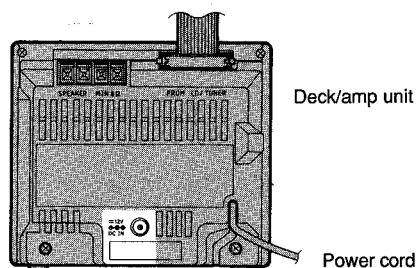
- When disconnecting



POWER SUPPLY


A. Connection of AC power cord

- Connect the AC power cord after all other connections have been made.



B. Operation on car battery (DC 12 V)



- First connect the car adapter to the DC IN 12 V jack, not the cigarette lighter socket, because shorting of a plug on the car may cause the fuse to blow out. In addition, be careful not to make a short-circuit between the plugs.
- **When using a car battery, be sure to use the specified car adapter (marked  available from an audio store) to prevent mishaps or damage resulting from different polarity design.**

Notes:

- When there is a power failure or the AC power cord is disconnected, the timer/clock setting is erased from memory. Reset the clock when the power supply is restored.
- Do not block the ventilation holes of the deck/amp unit so that heat can escape. Do not install the unit in a badly ventilated place.

6 Location of Main Parts

■ Tape Deck • Amplifier Sections

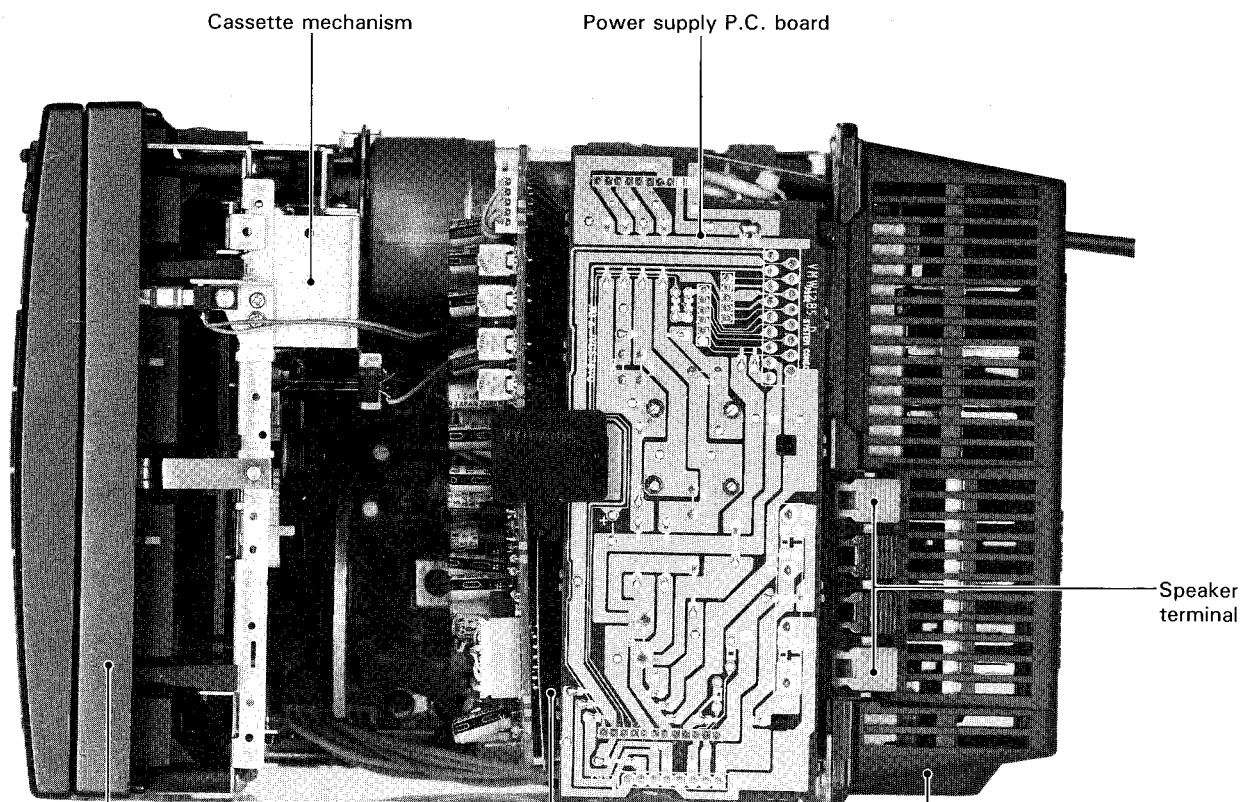


Fig. 6-1

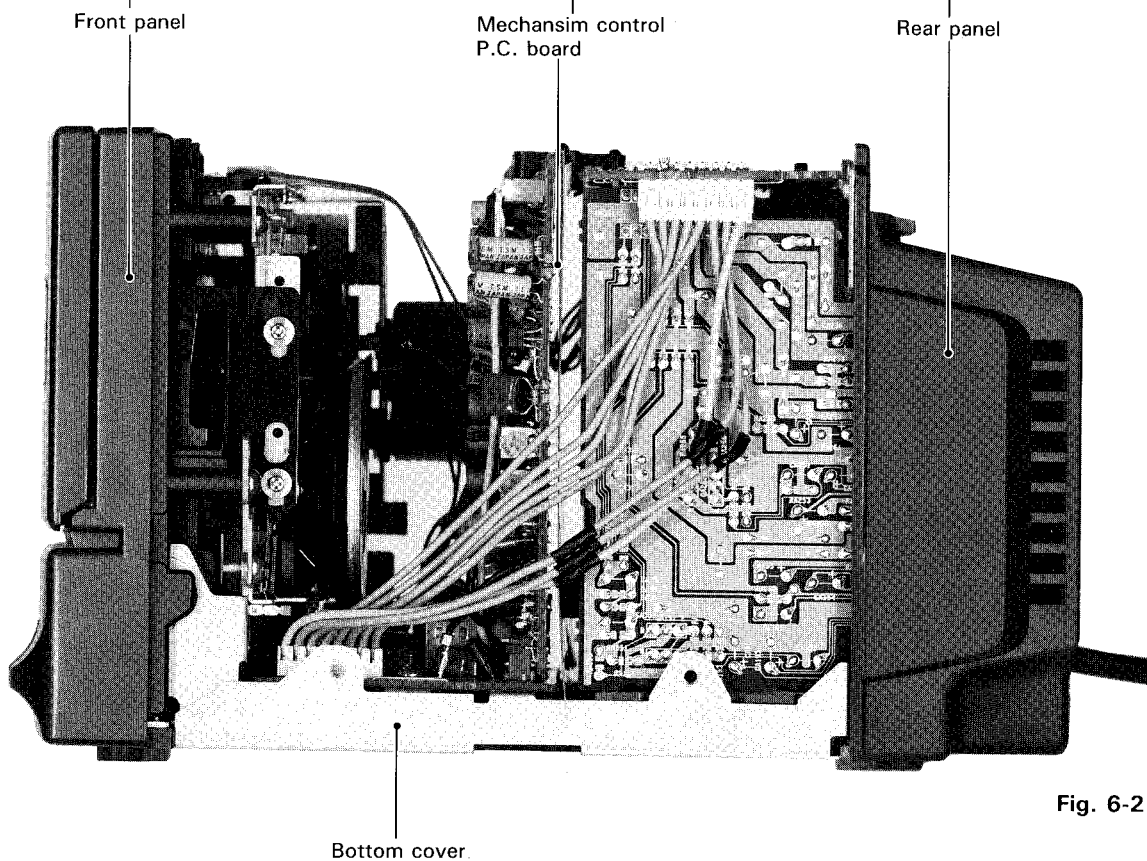


Fig. 6-2

■ CD • Receiver Sections

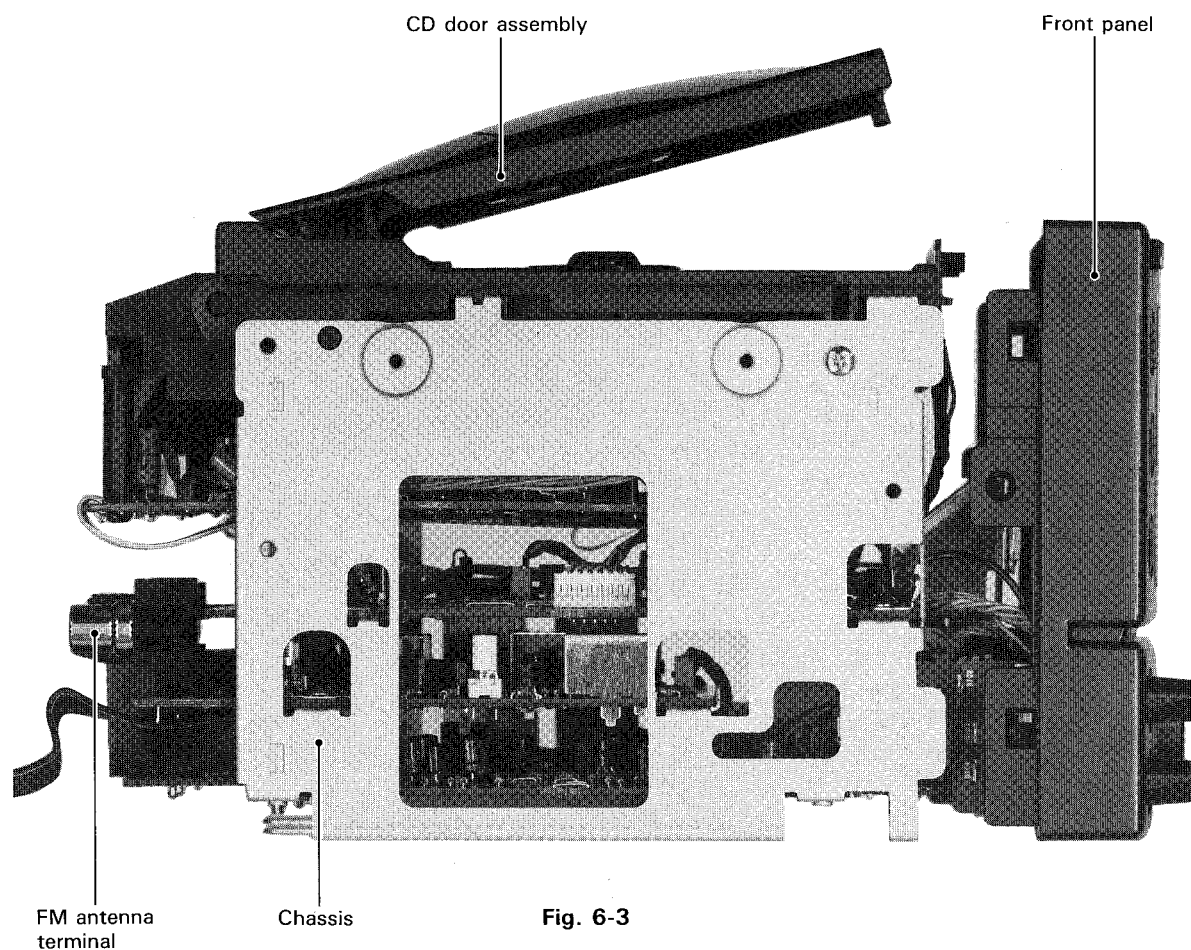


Fig. 6-3

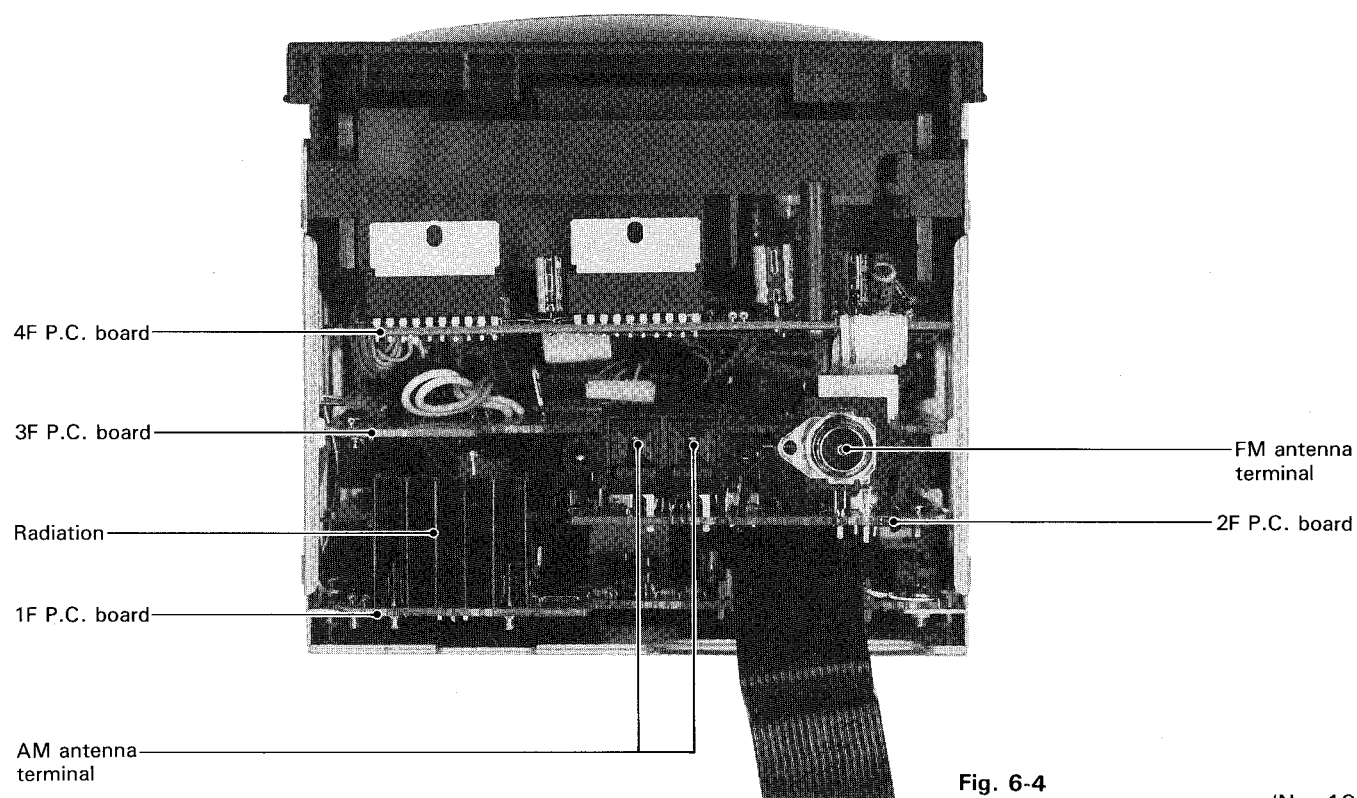


Fig. 6-4

7 Removal of Main Parts and Parts List

■ Tape Deck • Amplifier Sections (1/2)

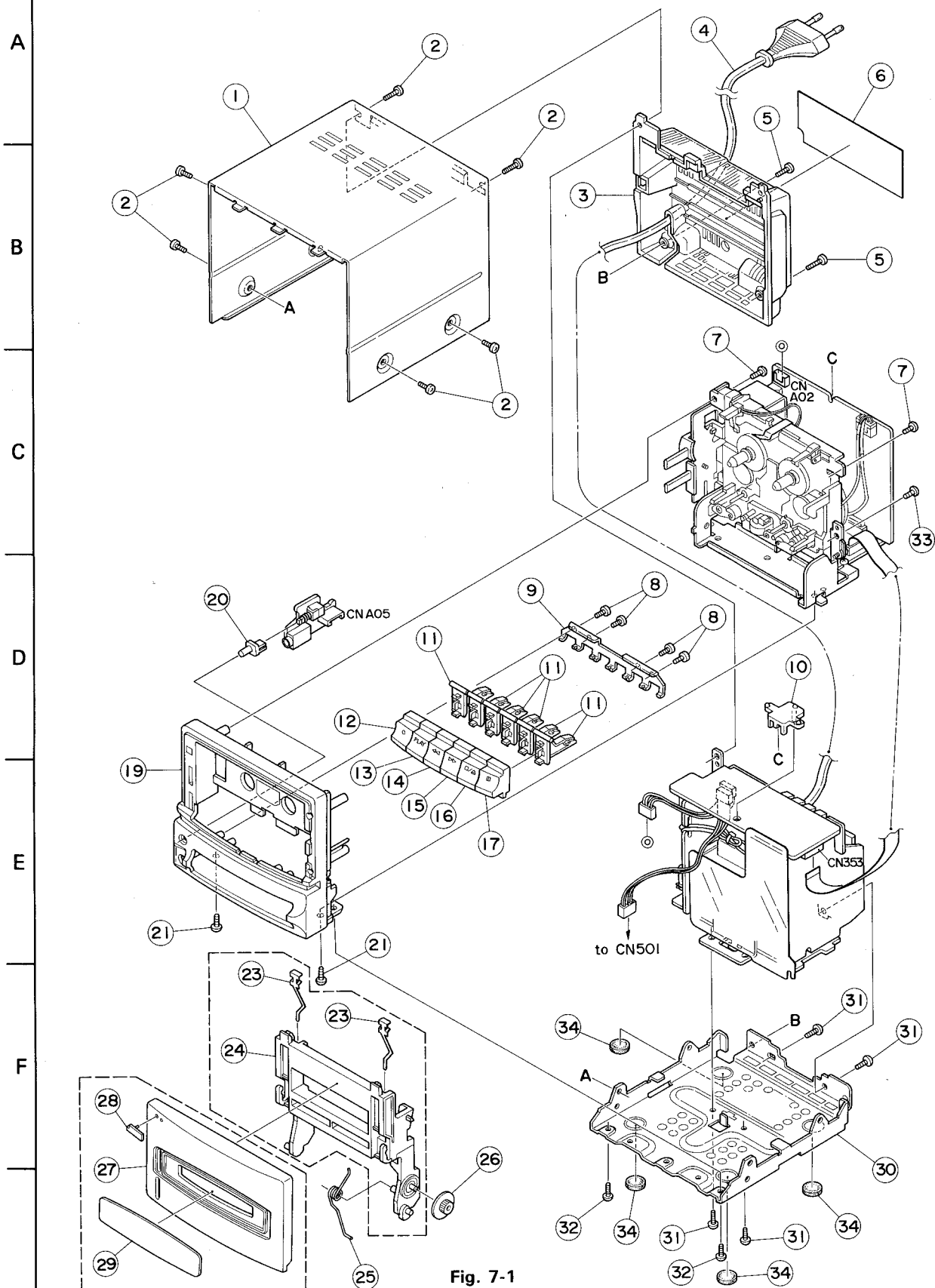


Fig. 7-1

• Parts List (1/2)

BLOCK NO. **M1MM**

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	27~29 23,24	ZCUXAD3K-CLBK ZCUXAD3K-CH	CASSETTE DOOR ASS'Y CASSETTE HOLDER ASS'Y		1 1
	1	VJC2412-002	TOP COVER		1
	2	SDST3008M	SCREW		6
	3	VJG1125-001	REAR PANEL(D)		1
△	4	QMP3900-200	POWER CORD	AC P.CORD	1
	5	SDST3008M	SCREW	REAR	2
△	6	VYN9189-122	NAME PLATE	REAR	1
	7	SBSF3008Z	SCREW	MECHA.F.PANEL	2
	8	SDSF2606Z	SCREW	EJECT KNOB	4
	9	VKL6107-002	BUTTON BRACKET		1
	10	VYH7695-001	P.C.B.HOLDER		1
	11	VKS4965-001	BUTTON LEVER	DARK GRAY	6
	12	VXP3517-007	BUTTON(REC)		1
	13	VXP3517-008	BUTTON(PLAY)		1
	14	VXP3517-009	BUTTON(REW)		1
	15	VXP3517-010	BUTTON(FF)		1
	16	VXP3517-011	BUTTON (STOP/EJECT)	DOOR HOLDER,	1
	17	VXP3517-012	BUTTON(PAUSE)		1
	19	VJG1124-001	FRONT PANEL(D)		1
	20	VXP5134-001	PUSH BUTTON		1
	21	SBST3006Z	SCREW		2
	23	VKY4180-001	CASSETTE SPRING		2
	24	VJT2304-001	CASSETTE HOLDER		1
	25	VKW5023-002	DOOR SPRING		1
	26	VYH5601-001	GEAR		1
	27	VJT2305-001	DOOR COVER		1
	28	E406971-222	JVC MARK	J MARK	1
	29	VJT4197-001	DOOR LENS		1
	30	VJC3237-001	BOTTOM COVER		1
	31	SBST3006Z	SCREW	TRANS BKT	2
		SBST3006Z	SCREW	TRANS BKT	2
	32	SBST3006Z	SCREW		2
	33	SBSF3010Z	SCREW	DOOR HOLDER	1
	34	VJF4003-003	FOOT		2

[Cautions]

The parts numbers of the first Model UX-A3E through to Model 3700 are as listed below:

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	12	VXP3517-001	BUTTON (REC)	LIGHT GRAY	1
	13	VXP3517-002	Button (PLAY)		1
	14	VXP3517-003	Button (REC)		1
	15	VXP3517-004	Button (FF)		1
	16	VXP3517-005	Button (STOP/EJECT)		1
	17	VXP3517-006	Button (PAUSE)		1

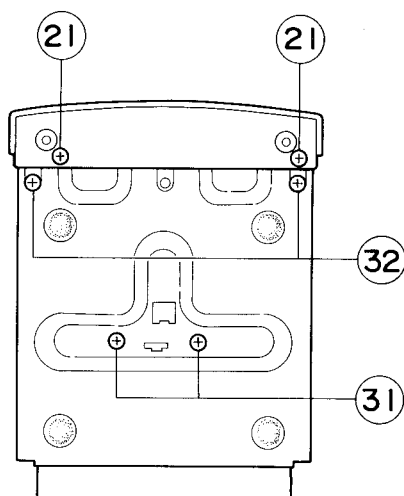


Fig. 7-2

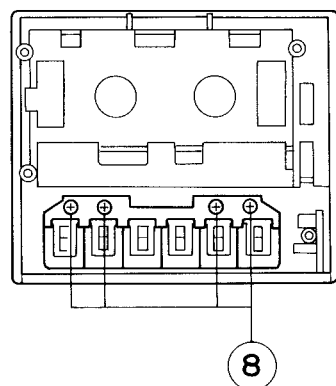


Fig. 7-3

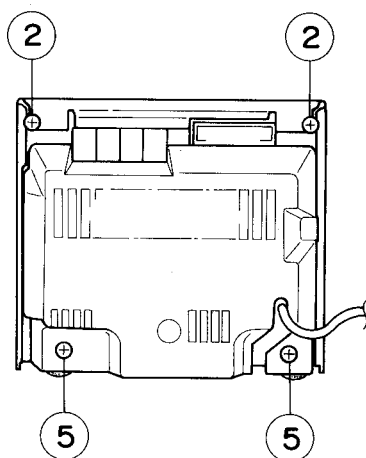


Fig. 7-4

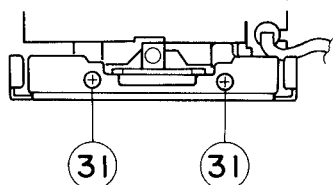


Fig. 7-5

■ Tape deck and amplifier section

• Metal Cover ①

Remove the six screws ② retaining the metal cover ①.

• Tape deck and power supply section

1. Detach the P.C. board ⑩ holder.
2. Remove the two screws ②① retaining the front panel, the bottom cover ③① and the jack holder together.
3. Disconnect the 5-pin connector protruding from connector JW6 on the head amplifier P.C. board installed on the cassette mechanism from the power supply P.C. board connector CN-353.
4. Disconnect the 6-pin and 5-pin connectors from connector CNA02 and connector CN501 of the head amplifier P.C. board installed on the back of the cassette mechanism that protrude from the connectors on the mechanism control P.C. board connector CNA02 and power supply P.C. board connectors JW5 and JW4 on the rear panel of the cassette mechanism.
5. Disassemble the power supply section and the deck section from each other.

■ Cassette Mechanism

1. Disconnect the 7-pin connector protruding from the head from the mechanism control P.C. board connector CNA01.
2. Disconnect mechanism control P.C. board connector CNA03 from head amplifier P.C. board connector CN503.
3. Remove the four screws ⑦ and ③③ retaining the cassette mechanism.
4. Remove from the knob of the door holder. At the same time, also disconnect connector CN505 of the head amplifier P.C. board and connector CNA05 the power supply switch/headphone jack P.C. board. Move the head amplifier P.C. board to the left.

• Front panel ①⑨

Remove four screws ⑧ retaining the button bracket ⑨ from the front panel.

• Rear panel ③

1. Remove the two screws ⑤ retaining the rear panel ③ from the bottom cover ③①.
2. Place the power cord ④ off the groove of the rear panel and take out the rear panel.

1 2 3 4 5

■ Tape Deck • Amplifier Sections (2/2)

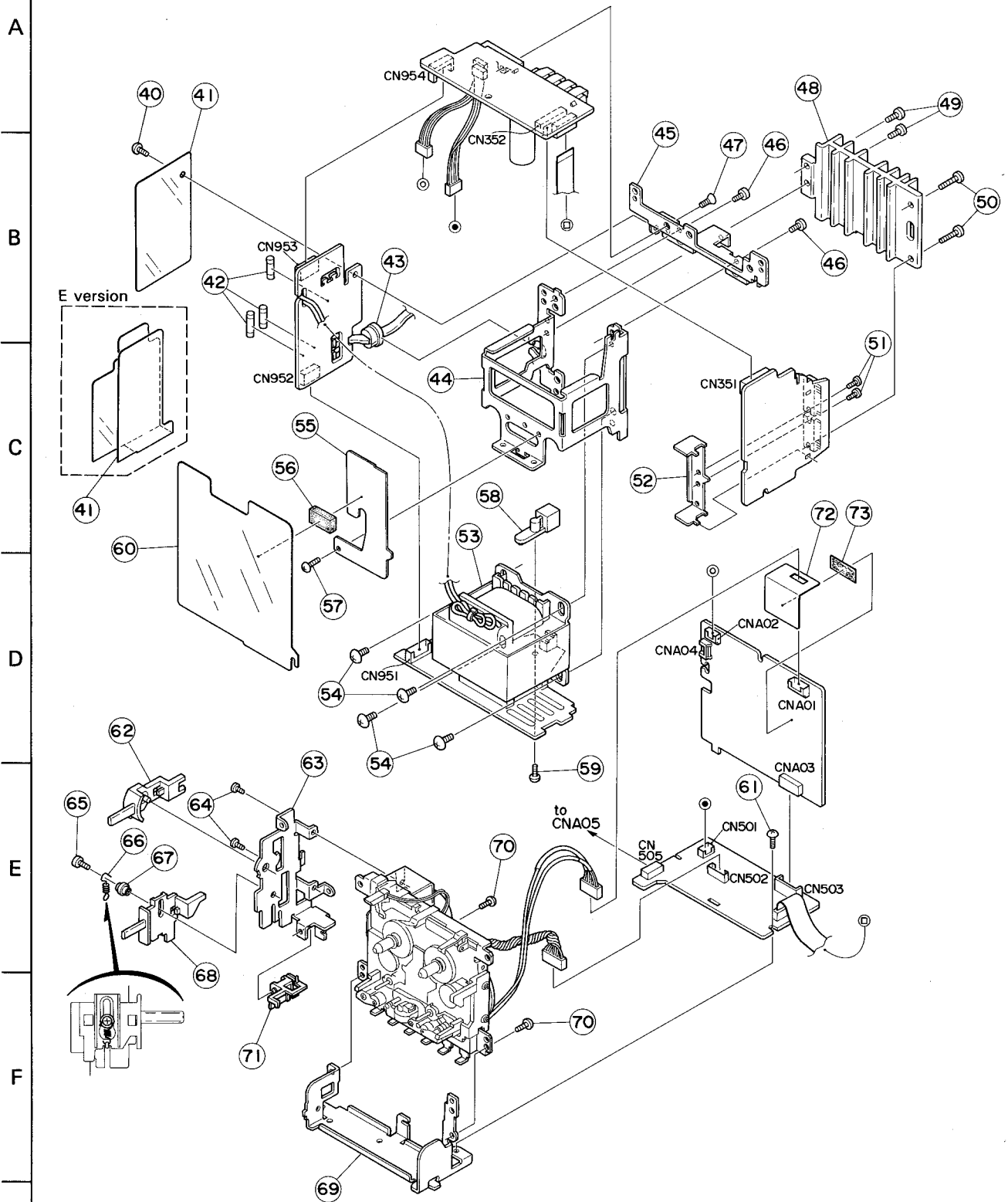


Fig. 7-6

• Parts List (2/2)

BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
40	SBST3008Z	SCREW	JACK HOLDER+PCB	1
41	VMA4557-001	BARRIER	FUSE PCB	1
42	QMF51E2-R50J1	FUSE	F951	1
	QMF51E2-5R0J1	FUSE	F952	1
	QMF51E2-5R0J1	FUSE	F954	1
43	QHS3876-162	S.R.BUSHING	AC CORD	1
44	VYH3658-002	TRANS BRACKET		1
45	VYH7698-001	JACK HOLDER		1
46	SBST3008Z	SCREW	JACK H+TRANS.H	2
47	SSSF3008Z	SCREW	JACK HOLDER	1
48	VYH7709-001	RADIATION		1
49	SSST3008Z	SCREW	RADI+T.BKT	2
50	SDST3014Z	SCREW		2
51	SDST2608Z	SCREW	IC+IC HOLDER	2
52	VYH7708-002	IC HOLDER		1
53	VTP66J2-12A	POWER TRANS	T951	1
54	SBST4006Z	SCREW	TRANS	4
55	VMA4553-001	SHIELD PLATE		1
56	VYSH105-033	SPACER		1
57	SDST3004Z	SCREW	SHIELD+T.BKT	1
58	VYH7696-001	JACK STOPPER		1
59	SBSF3008Z	SCREW	JACK HOLDER	1
60	VMA4556-001	INSULATOR	PRE PC BOARD	1
61	SBST3006Z	SCREW		1
62	VXQ4112-001	MODE LEVER		1
63	VYH3740-001	MECHA BRACKET		1
64	SDST2004Z	SCREW		2
65	SDST2606Z	SCREW	NO.67	1
66	VKW5022-001	SPRING		1
67	VYH5833-002	COLLAR		1
68	VXS3037-001	DIRECTION LEVER		1
69	VYH3736-001	DOOR HOLDER		1
70	SBST3008Z	SCREW		2
71	VYH7694-001	REC LEVER		1
72	VMA4560-001	SHIELD		1
73	VYSS1R5-059	SPACER		1

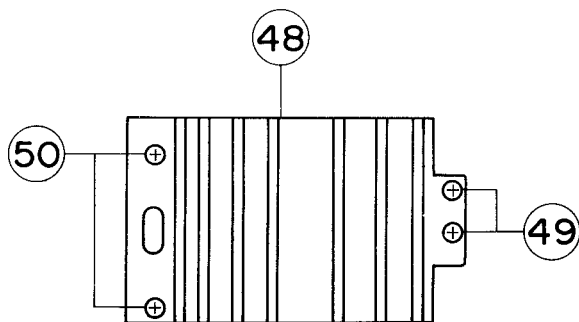


Fig. 7-7

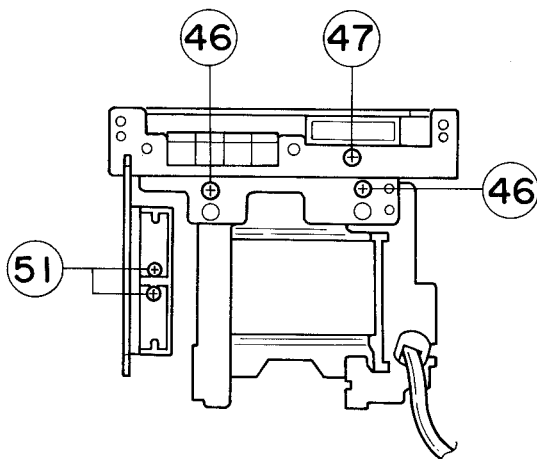


Fig. 7-8

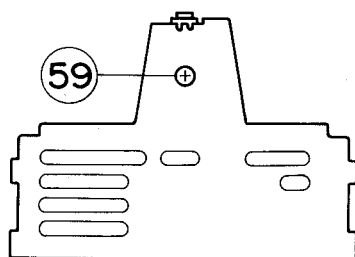


Fig. 7-9

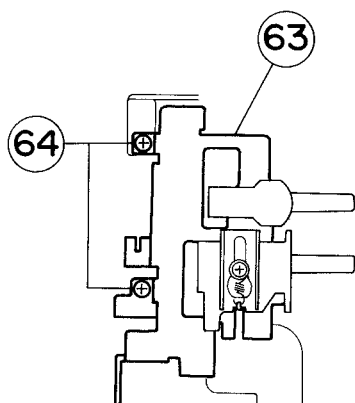


Fig. 7-10

- Radiation 48

1. Remove for screws 49 and 50 retaining the radiation 48 .

- Jack holder 45 and speaker terminal P.C. board

1. Remove the screws 47 retaining the speaker terminal P.C. board from the jack holder 45 .
2. Disconnect connector CN353 and CN351 connecting the speaker terminal P.C. board and the power amplifier P.C. board.

- Power trans 53 and trans bracket 44

1. Remove the four screws 54 retaining the power supply transformer 53 from the transformer bracket 44 .
2. Remove the four screws 49 and 50 retaining the heat sink 48 from the transformer bracket and the power IC.

- Mechacon P.C. board and pre-amplifier P.C. board

1. Disconnect the connector CNA03 on the pre-amplifier P.C. board from the connector CN503 on the mechacon P.C. board.
2. Disconnect the mechacon P.C. Board from the cassette mechanism.

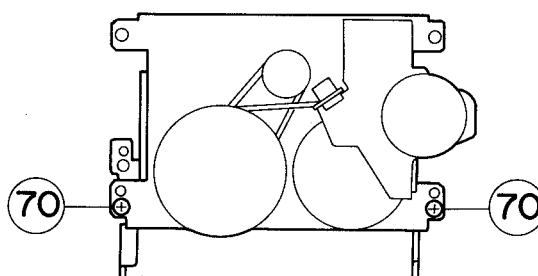


Fig. 7-11

A

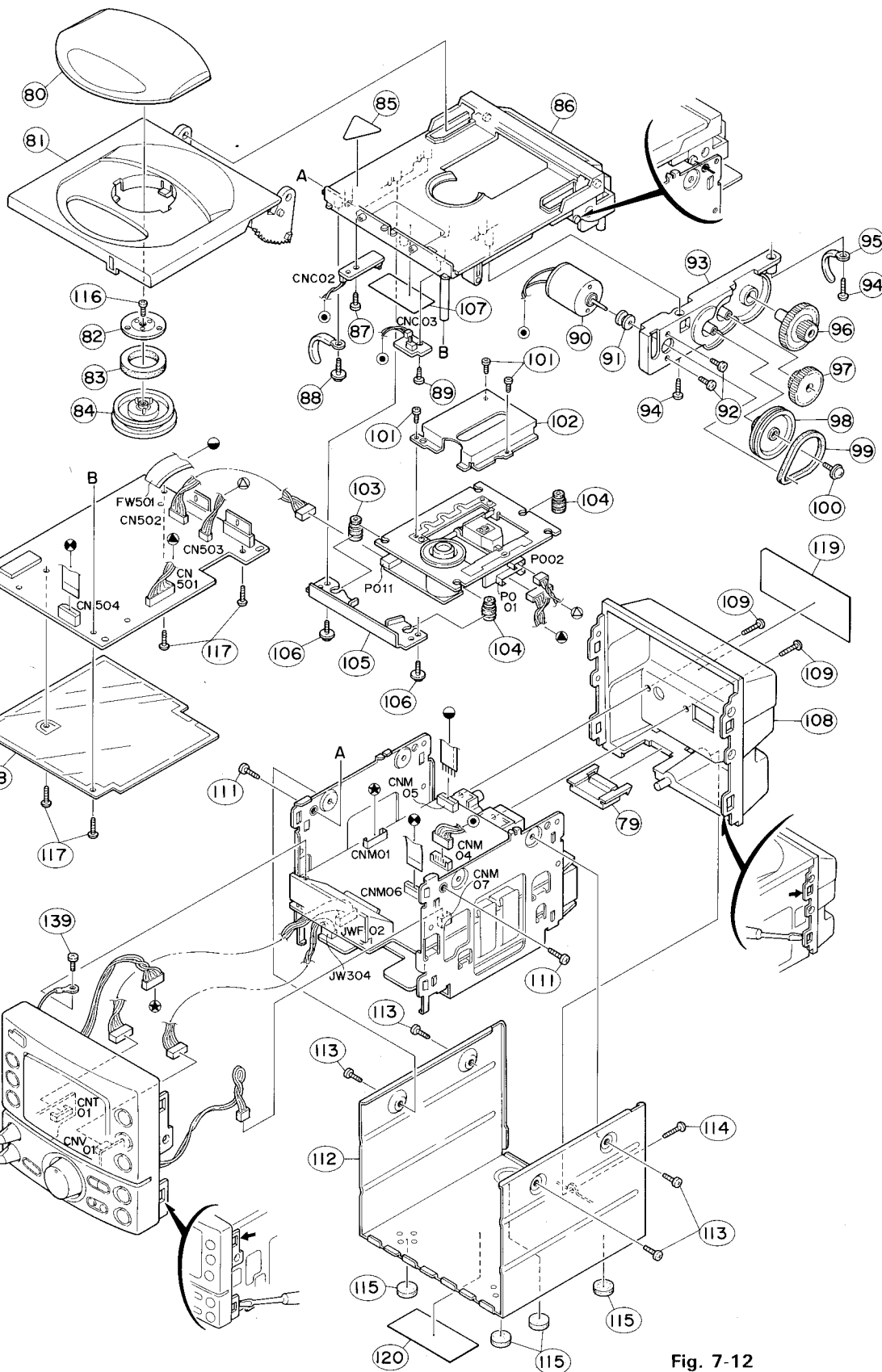


Fig. 7-12

• Parts List (1/2)

BLOCK NO. **M3MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
79	VYH7707-001	WIRE HOLDER		1
80	VJT3311-004	CD DOOR LENS		1
81	VJT2306-001	CD DOOR		1
82	VYH7677-001	YOKE		1
83	VYH7313-001R	MAGNET		1
84	VYH3726-001	CLAMPER		1
85	E71541-001	E.I.LASER MARK		1
86	VJD1149-004UL	CD CASE		1
87	SBSF3010Z	SCREW		1
88	SBSF3010Z	SCREW		1
89	SBSF3006Z	SCREW	SW PWB+CD CASE	1
90	MXN-13FB12F	DC MOTOR ASS'Y	CASSETTE DOOR	1
91	VYH7699-001	PULLEY	MOTOR	1
92	SPSP3004Z	SCREW	MOTOR+GEAR BKT	2
93	VYH3659-001	GEAR BRACKET		1
94	SBSF3010Z	SCREW	CD CASE+GEAR BKT	2
95	VKZ4001-110	WIRE CLAMP		2
96	VYH7358-001	GEAR(B)		1
97	VYH7357-001	GEAR(A)		1
98	VYH7356-002	PULLEY		1
99	VKB3000-144	BELT		1
100	GBSF3006Z	SCREW	PULLEY+GEAR BKT	1
101	SDST2006M	SCREW	CD MECHA+P.COVER	3
102	VJD5318-002	PICK COVER		1
103	E75609-002	INSULATOR		1
104	E75609-001	INSULATOR		2
105	VYH7297-102	HOLDER		1
106	SBSF3010Z	SCREW	HOLDER+CD CASE	2
107	VND4220-001	LASER CAUTION		1
108	VJG1137-001	REAR PANEL(T)		1
111	SDSF3008Z	SCREW	CD+CHASSIS UNIT	2
112	VJC2411-003	METAL COVER		1
113	SDST3006M	SCREW		4
114	SBSF3008M	SCREW		1
115	VJF4003-003	FOOT		4
116	SDSF2606Z	SCREW		1
117	SBSF3010Z	SCREW	CD AMP PWB+CD	4
118	VMA4502-001	SHIELD		1
119	VYN9189-101	NAME PLATE		1
120	VND4221-001	CLASS 1 LABEL	METAL COVER	1

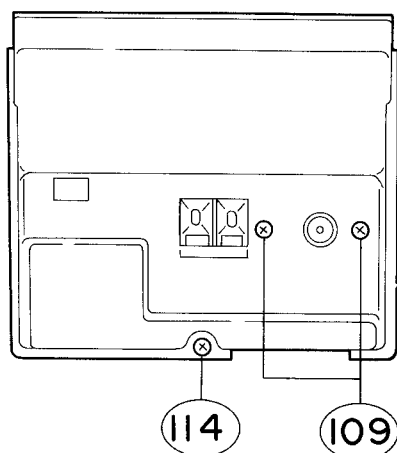


Fig. 7-13

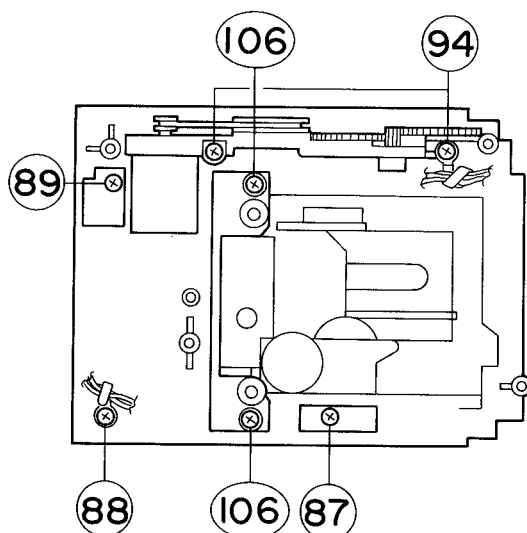


Fig. 7-14

■ CD and receiver sections

• Metal cover (112)

Remove the five screws (113) and (114) retaining the metal cover (112).

• Rear Panel (108)

1. Remove the two screws (109) retaining the rear panel (108).

2. As shown in the figure, use a flat-tipped screwdriver and remove the left and right knobs at four places on the chassis (143) that retains the rear panel (108).

• CD player section

1. Remove the two screws (111) retaining the CD player section from the left and right of the chassis (143).

2. Remove the left and right protrusions retaining the CD player section from the chassis, and take out the CD section.

3. Disconnect the card wire protruding from connector CN504 of the CD control P.C. board (board 4F) from connector CNM06 of the microcomputer/LCD display P.C. board (board 3F).

4. Disconnect the 5-pin parallel wire protruding from JW501 of P.C. board 4F from connector CNM05 of P.C. board 3F.

5. Disconnect the connectors protruding at two places of the switch P.C. board retaining the CD case from connector CNM04 of P.C. board 3F.

6. Remove the three screws (117) retaining the CD control P.C. board.

7. Remove the connectors protruding at three places on the CD mechanism from connectors CN502, CN503 and CN501 on the CD control P.C. board.

• CD case (86)

Remove the screws (87) and (89) retaining the switch P.C. board at two places from the CD case (86).

• Front panel section

1. As shown in the figure, use a flat-tipped screwdriver and remove the left and right knobs at four places that retain the front panel assembly.

2. Remove the screw (116) retaining the lug wire protruding from the front panel assembly from P.C. board 3F.

3. Disconnect the 7-pin connector and 2-pin connector protruding from the front panel assembly from connectors CNM01 and CNM-7 of P.C. board 3F.

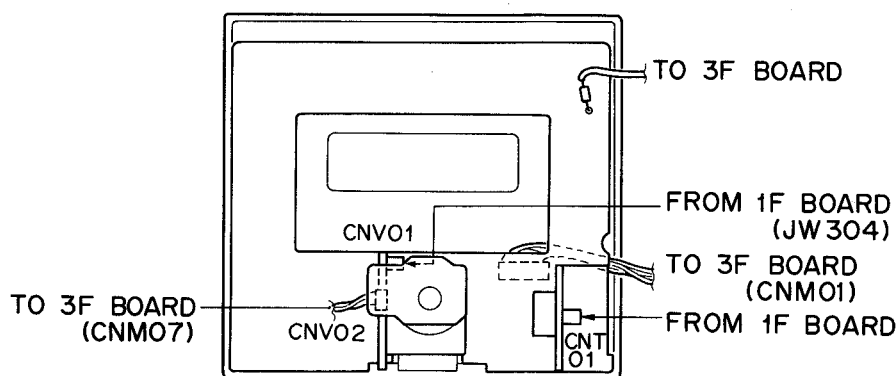
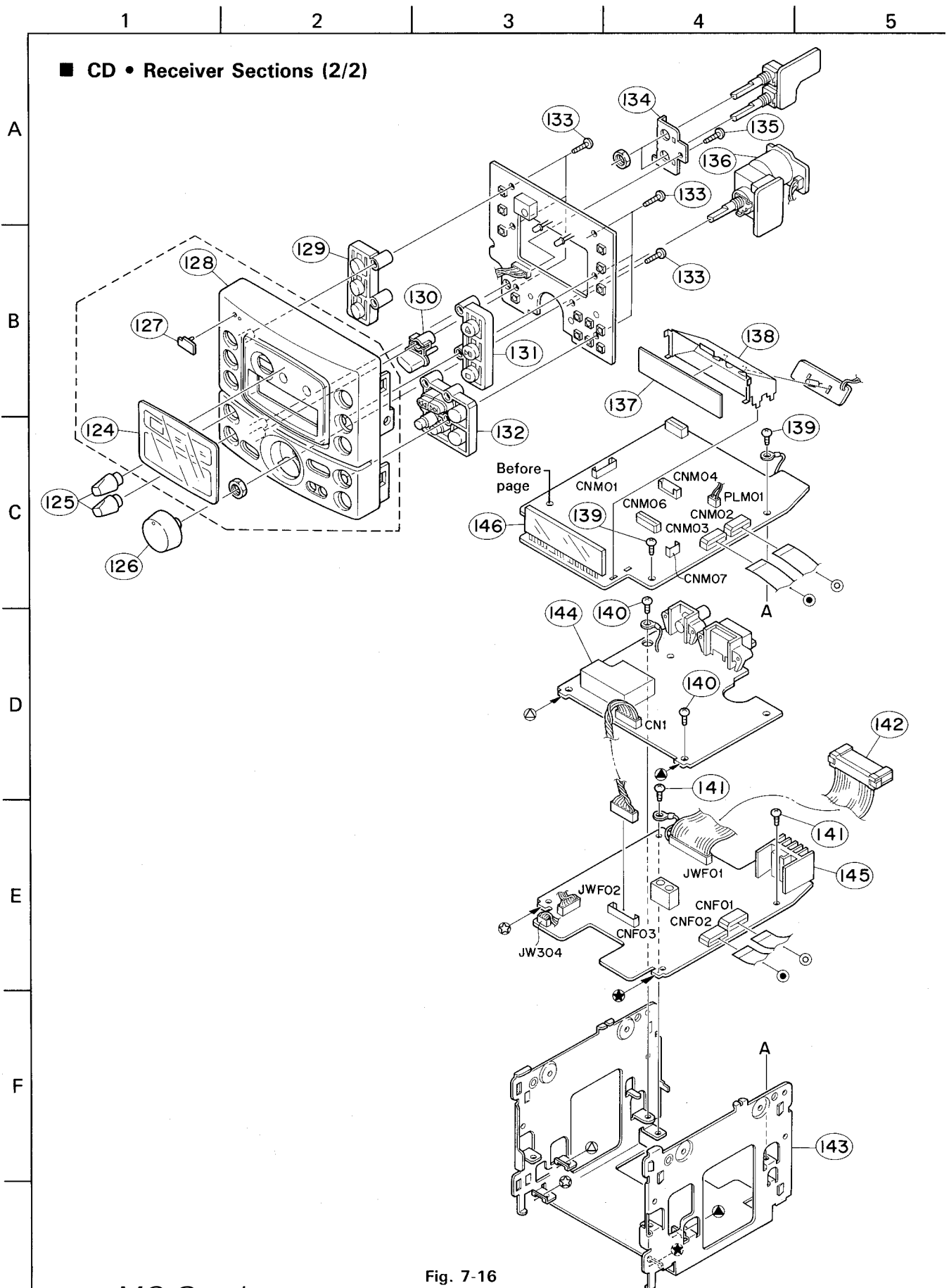


Fig. 7-15



• Parts List (2/2)

BLOCK NO. **M4MM**

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	124,127 128	ZCUXA3K-FBK ZCUXRA3E-FB ZCUXRA3EN-FB ZCUXRA3G-FB ZCUXRA3B-EB	FRONT CABINET ASS'Y FRONT CABINET FRONT CABINET FRONT CABINET FRONT CABINET		1
	124 125 126	VJT4196-001 VXL4374-002 VXL4375-004	LCD LENS KNOB VOLUME KNOB		1 2 1
	127 128 129 130 131	E406971-222 VJG1123-001 VXP5132-001 VXP5133-001 VXP5131-002	JVC MARK FRONT PANEL(T) BUTTON(L) BUTTON BUTTON(R)		1 1 1 1 1
	132 133 134 135 136	VXP3418-002 SBSF2610Z VYH7348-002 SBSF2610Z VCV1001-101	PUSH KNOB SCREW VOLUME BRACKET SCREW VR WITH MOTOR	F PWB+F.PANEL FRONT PWB VOLUME BKT+PANEL VRV01	1 7 1 1 1
	137 138 139 140 141	VYTT608-002 VYH3734-001 SBST3006Z SBST3006Z SBST3006Z	LCD FILTER LAMP CASE SCREW SCREW SCREW	CPU PWB+CHASSIS TU PWB+CHASSIS FUNC PWB+CHASSIS	1 1 3 2 2
△	142 143 144 145 146	VMP0092-001 VYH2269-001 VMA4486-001 VYH7734-001 VGL1122-001	SYSTEM WIRE ASY CHASSIS SHIELD CASE HEAT SINC LCD	JWF01 LCM01	1 1 1 1 1

142

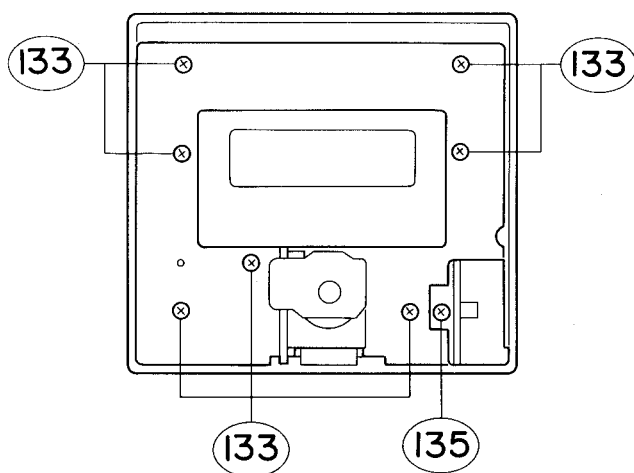


Fig. 7-17

• Front panel assembly

1. Disconnect the 5-pin connector protruding from connector JW304 of P.C. board 1F from connector CNV01 of the electric volume control P.C. board.
2. Remove the volume knob.
3. Remove the nut retaining the electric volume control from the front panel assembly.
4. Disconnect the 8-pin connector protruding from connector JWF02 of P.C. board 1F from connector CNT01 of the BASS/TREBLE P.C. board.
5. Remove the screw 135 retaining the BASS/TREBLE volume control P.C. board from the front panel assembly. Remove the BASS/TREBLE knob from the front panel assembly. When replacing the BASS/TREBLE volume control knob, remove the nut retaining the volume control from the volume control bracket 134.

• Operation switch board

Remove the seven screws 133 retaining the operation switch P.C. board.

• 3F P.C. board

1. PROOF Remove the two screws 139 retaining P.C. board 3F from the chassis 143.
2. Disconnect the card wire protruding from connectors CNF02 and CNF01 from connectors CNM03 and CNM02 of P.C. board 3F.

• 2F P.C. board

1. Remove the three screws 140 retaining P.C. board 2F from the chassis 143.
2. Disconnect the 10-pin connector protruding from connector CN1 of P.C. board 2F from connector CNF03.

• 1F P.C. board

Remove the two screws 141 retaining P.C. board 1F from the chassis.

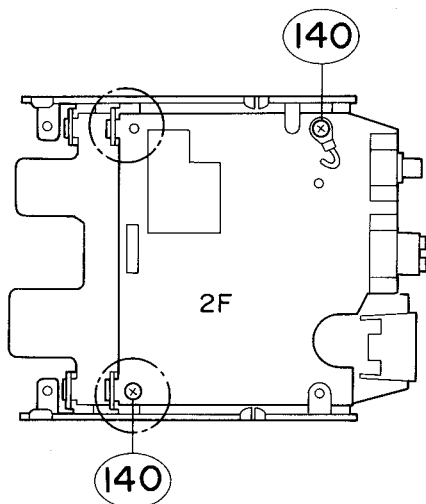


Fig. 7-18

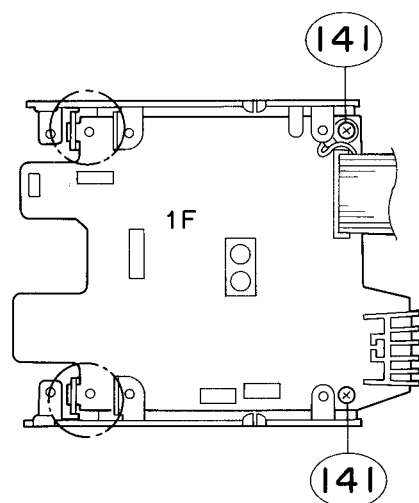


Fig. 7-19

A

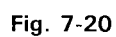
B

C

D

E

F



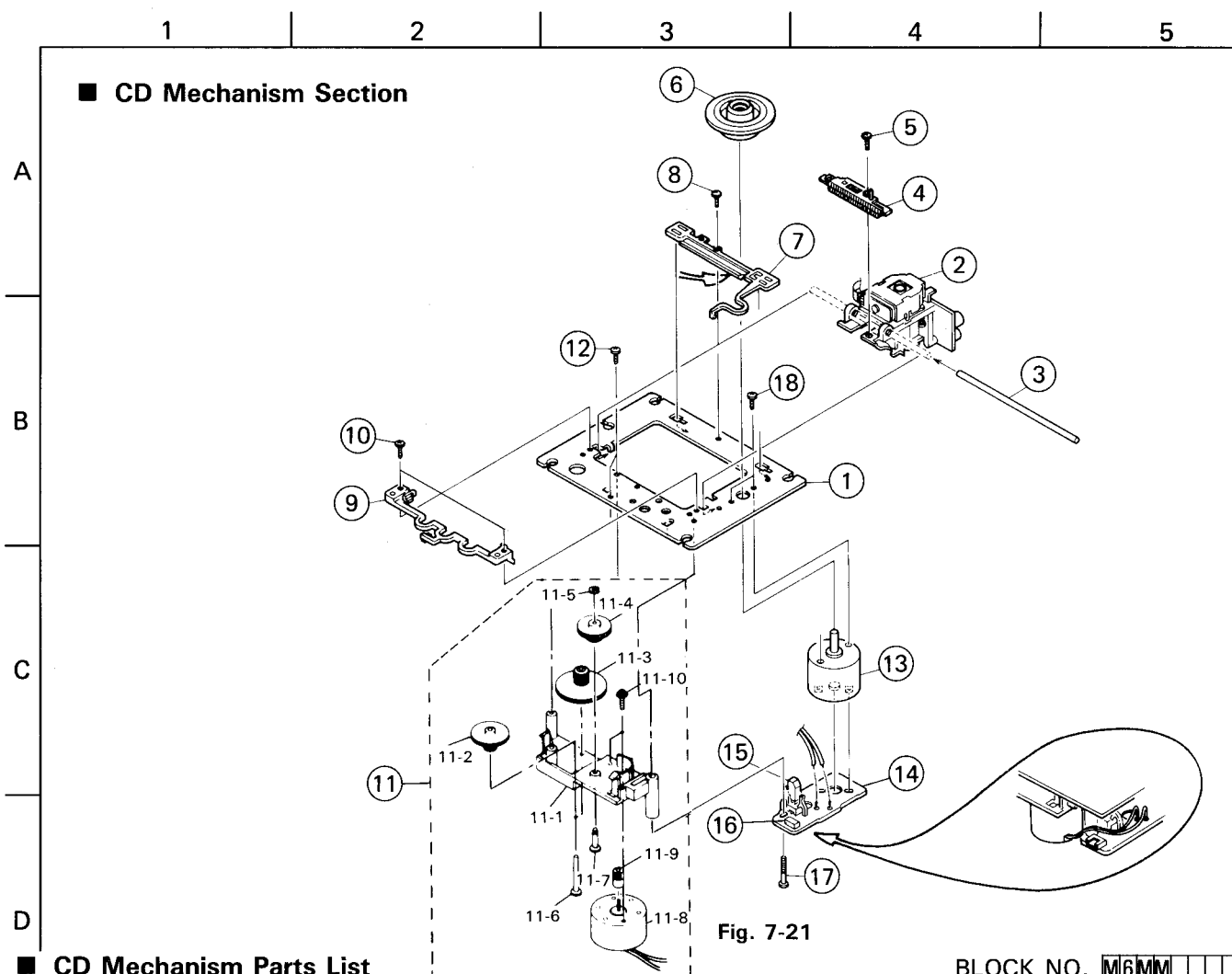
■ Cassette Mechanism Parts List

BLOCK NO. M5MM

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	186502502T	HEAD PANEL ASSY		1
	2	18650218T	CHP LEVER		1
	3	18651441T	E KICK STOPPER		1
	4	18650211T	SPRING		1
	5	186502315T	H.BASE ASS'Y		1
	8	62020605T	HEAD		1
	9	18650129T	REC S.LEVER (F)		1
	10	18650130T	REC S.LEVER(R1)		1
	11	18650131T	REC S.LEVER(R2)		1
	12	186505502T	T.R.PLATE (R)		1
	13	186505501T	T.R.PLATE (F)		1
	14	186505312T	T. ROLLER ASS'Y		2
	15	186504306T	P.R.ARM(R)ASS'Y		1
	16	18650228T	COLLAR		2
	18	186509315T	F.L.M.(R)ASS'Y		1
	19	186504307T	P.R.ARM(F)ASS'Y		1
	20	18650420T	P.ROLL.SPRING		1
	21	18650910T	FLYWHEEL METAL		1
	22	18650546T	SPRING(F)		1
	23	18650547T	SPRING(R)		1
	24	18652205T	CONTROL LEVER		1
	25	186505310T	REEL ASS'Y (R)		1
	28	186505311T	REEL ASS'Y (F)		1
	29	18650532T	SPRING		1
	30	18651401T	MAIN BASE		1
	31	18650258T	SPRING	FOR CLAMP	1
	32	18651471T	SPRING	BOTOM LEVER	1
	33	640101129T	LEAF SWITCH		2
	34	18651432T	SPRING	BUTTON LEVER	1
	35	18651455T	SPRING	BUTTON LEVER	1
	37	18650102T	PACK SPRING		1
	38	18650120T	FF GEAR		1
	39	18650421T	SPRING		1
	40	18650422T	SPRING	P.ARM	1
	41	18651301T	SLIDE LEVER		1
	42	18651302T	COLLAR		2
	43	18651309T	SPRING		1
	44	186501508T	CHASSIS ASS'Y		1
	45	18652232T	CH SLIDE LEVER		1
	46	18652236T	SPRING	CH GEAR	1
	47	18652240T	CH COLLAR A		1
	48	18652241T	CH COLLAR B		1
	49	18652227T	REC S.LEVER		1
	50	18651429T	PC STOPPER		1
	51	186514504T	PUSH BUT.ACT.AS		1
	52	18651463T	SPRING		1
	53	18651407T	SWITCH CAM		1
	54	18651428T	RWD LEVER		1
	55	18651453T	LEVER	REC.BUTTON	1
	56	18651466T	PLAY BUT.LEVER		1

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	57	18651418T	BUTTON LEVER	REWIND	1
	58	18651419T	BUTTON LEVER	FF	1
	59	18651420T	BUTTON LEVER	STOP	1
	60	186514501T	PAUSE BUT.LEVER		1
	61	18210115T	PAUSE LEVER		1
	62	18210116T	LEVER SPRING		1
	63	18210134T	PAUSE STOPPER		1
	64	18652237T	MODE LEVER		1
	65	18652261T	SENSING PLATE		1
	67	18651121T	COLLAR SCREW		5
	68	186507304T	RF CLUTCH ASS'Y		1
	69	18001143T	SPRING		1
	70	18650712T	BELT		1
	71	18652104T	LIFT SPRING		1
	72	186521504T	LIFT ARM ASS'Y		1
	73	18652119T	SPRING		1
	74	186521503T	M TRIG.ARM(A)AS		1
	75	18652121T	M GEAR		1
	76	18652118T	SPRING		1
	77	18652113T	M TRIG. ARM B		1
	78	18652259T	CH GEAR		1
	79	18651701T	P GEAR		1
	80	18651708T	SPRING		1
	81	18651604T	COLLAR		1
	82	186517502T	P TRIG.ARM ASSY		1
	83	18651709T	RF TRIGGER ARM		1
	84	18651710T	RF COLLAR		1
	85	186517501T	P ACT. ARM ASSY		1
	86	17001613T	SPRING		1
	87	186511503T	C.GEAR PL. ASSY		1
	88	18651113T	SPRING		1
	89	18651112T	SPRING		1
	90	18651102T	CAM GEAR		1
	91	18651123T	BELT		1
	92	18651124T	BELT		1
	93	18651109T	RF LEVER		1
	94	18651103T	SENSING PLATE		1
	95	18651114T	CONTROL LEVER		1
	96	18651111T	SPRING		1
	97	18652231T	STOP LEVER		1
	98	18652229T	FUNCTION	DOBLE SLIDED	1
	99	18652235T	SPRING		1
	100	186509359T	CAPSTAN ASS'Y		1
	101	186509353T	FL GEAR CAP.ASY		1
	102	18650985T	MAIN BELT		1
	106	18211280T	M COLLAR SCREW		3
	107	18201306T	RUBBER CUSHION		3
	108	18650950T	MOTOR BRACKET		1
	109	1865023T	RELAY B.PLATE		1

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	110,111	186509369T	MOTOR ASS'Y		1
	120	18652115T	TORSION SPRING		1
	121	18652226T	REC C.LEVER		1
	122	18652263T	SPRING		1
	123	18652228T	M KICK LEVER		1
	124	18652239T	COLLAR		1
	125	18652266T	COLLAR		1
	126	18400245T	SPRING		1
	127	186522505T	CH LEVER(H) ASSY		1
	128	18652246T	SPRING		1
	129	18652244T	CH LEVER(J)		1
	130	18521711T	SPRING		1
	131	18652245T	CH LEVER(K)		1
	132	18652247T	SPRING		1
	133	18650965T	CORD CLAMPER		1
	134	18651115T	TORSION SPRING		1
	135	18652253T	M SWITCH LEVER		1
	136	18652254T	M SW.LEV.COLLAR		1
	137	18652255T	M SW.LEV.SPRING		1
	138	18650136T	TORSION SP.		1
	139	18650137T	TORSION SPRING		1
	200	90760000T	SCREW		2
	202	90780000T	ASS'Y SCREW		1
	203	90860000T	SCREW		1
	206	91810000T	SCREW		2
	207	91780000T	SCREW		1
	210	92190000T	CAP SCREW		1
	215	95470000T	MINI SCREW		2
	216	95610000T	MINI SCREW		1
	217	99760000T	CAMERA SCREW		1
	218	98250000T	MINI SCREW		1
	219	95600000T	SPECIAL SCREW		1
	220	99870000T	MINI SCREW		2
	222	99991802T	SPECIAL SCREW		2
	224	98090000T	CAMERA SCREW		2
	225	98980000T	MINI SCREW		6
	227	99991808T	TH TAP SCREW		1
	228	99991807T	CAMERA SCREW		1
	230	96740000T	TAPPING SCREW		4
	233	99992001T	CAP SCREW		2
	235	95020000T	E.RING		5
	236	95000000T	E.RING		1
	237	94860000T	E.RING		2
	238	94970000T	E.RING		1
	240	97440000T	P.WASHER		2
	241	94210000T	P.WASHER		4
	242	98830000T	P.WASHER		1
	243	97870000T	P.WASHER		1



■ CD Mechanism Parts List

BLOCK NO. M6MMMM

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	E26487-003	Chassis Base		1
	2	OPTIMA-5S	Pickup Ass'y		1
	3	E74930-003	Shaft		1
	4	E306282-001	CD Luck Ass'y		1
	5	SPSH2050M	Screw		1
	6	E406064-002	Turn Table Ass'y		1
	7	E306275-003	Suport		1
	8	SDST2005Z	Screw		1
	9	E306277-001	Holder		1
	10	SDST2004Z	Screw		2
	11	SE10351-11	Gear Ass'y		1
	11-1	E306276-001	Gear Base		1
	11-2	E75444-001	Gear		1
	11-3	E75443-001	Gear		1
	11-4	E75445-001	Gear		1
	11-5	WDM163550	Slit Washer		1
	11-6	E75494-003	Shaft		2
	11-7	E75494-002	Shaft		1
	11-8	HKN-3A6RDNV	Feed Motor		1
	11-9	E75493-001	Pinion Gear		1
	11-10	LPSH1735Z	Screw		2
	12	E72713-001	Screw		2
	13	E74539-001B	Spindle Motor		1
	14	E12114-005(S)	Print Circuit Borad		1
	15	ESB1100-005	Leaf Switch	5001	1
	16	EMV5109-006B	Plug Ass'y	6 Pin	2
	17	E75832-001	Screw		1
	18	SDSP2003N	Screw		2

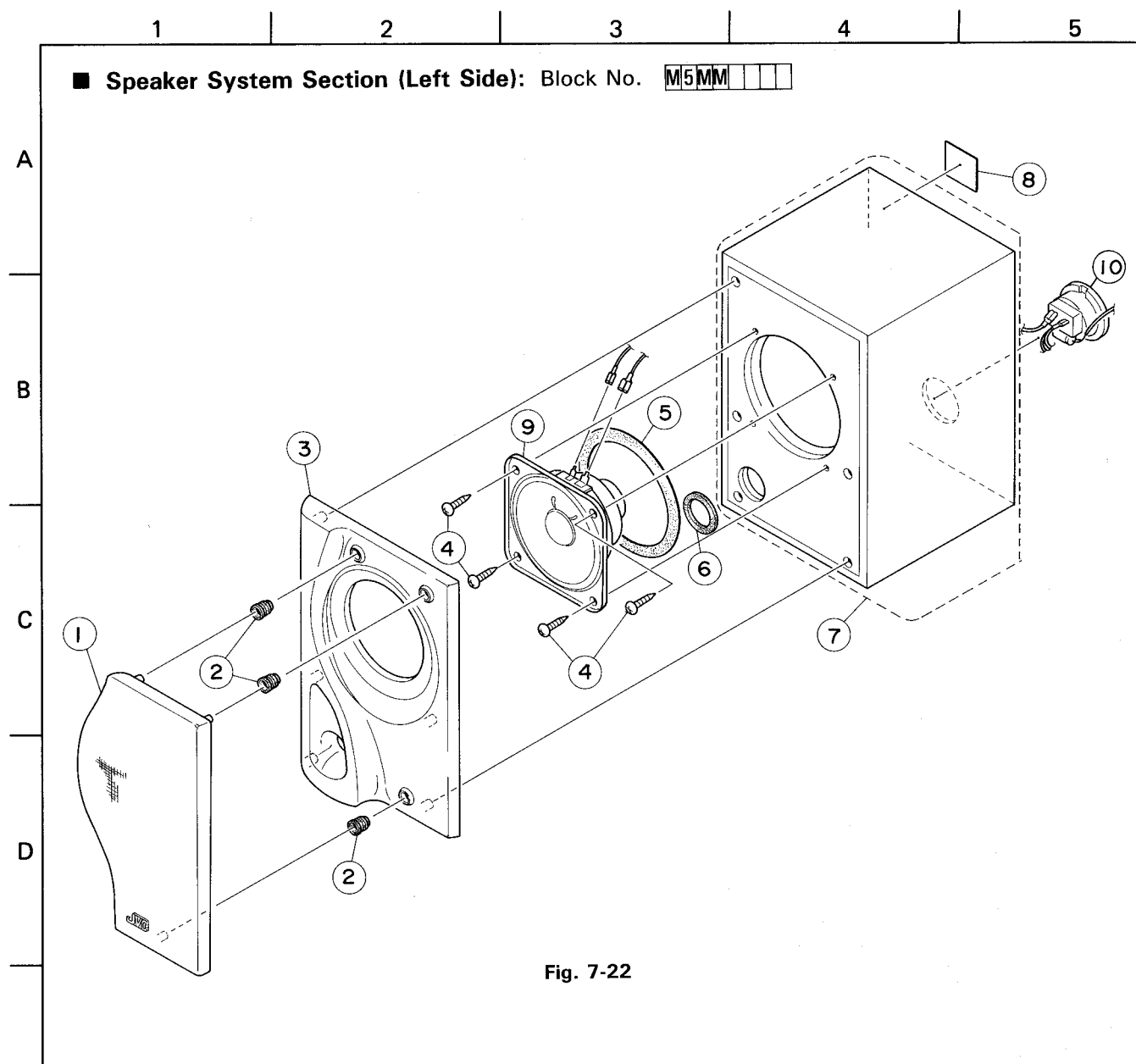


Fig. 7-22

■ Speaker System Section (Left Side):

BLOCK NO. **M7MM**

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	DH903-LUX-A3	Grill Assembly	Left	1
		DH903-RUX-A3	Grill Assembly	Right	1
	2	DH429-4C-638	Catch Black	L, R	6
	3	DH401-LUX-A3	Front Panel	Left	1
		DH401-RUX-A3	Front Panel	Right	1
	4	SDSA4012M	Wood Screw (4 × 12)	L, R	8
	5	DH429-UX-A3	Packing	L, R	2
	6	DH430-UX-A3	Rubber Sponge	L, R	2
	7	DH505-LUX-A3	Speaker Box	Left	1
		DH505-RUX-A3	Speaker Box	Right	1
	8	DH610-UX-A3	Name Plate	L, R	2
	9	VGS1001-012	Speaker (10 cm)	L, R	2
	10	203-DHJ-12	Speaker Terminal	L, R	2

■ Speaker System

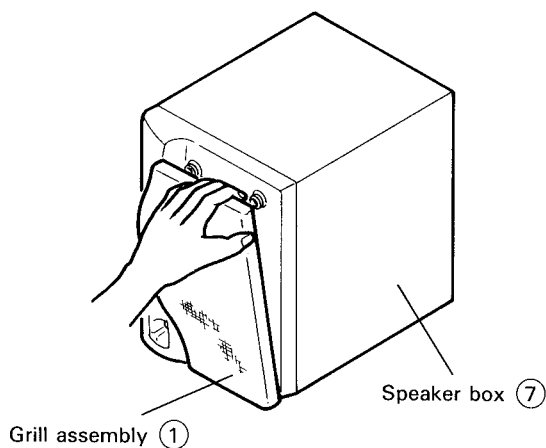


Fig. 7-23

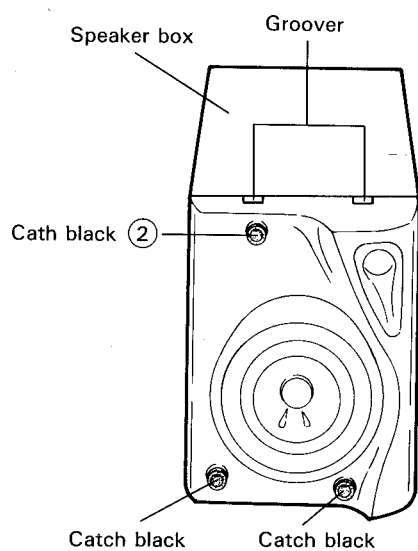


Fig. 7-24

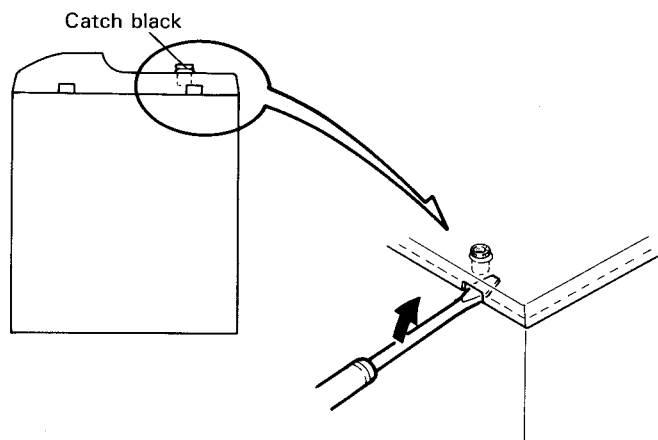


Fig. 7-25

Note: Front panel and speaker box are provided together with as an assembly for servicing. They won't be supplied individually.

■ Speaker box

1. Remove the grill assembly ① by hand (Fig. 7-23)
2. Stand the speaker box ⑦ upside down as shown in Fig. 7-24.
3. Insert an ordinary (—) screwdriver into the right hole shown in Fig. 7-24 and Fig. 7-25 and push the bottom end of the catch black ② upside.

Note: Since high power adhesive is used to glue the boss of the front panel and the speaker box together, apply a constant force for a long time to separate them from each other.

If it is intended to do in a short time, the boss of the front panel will be damaged.

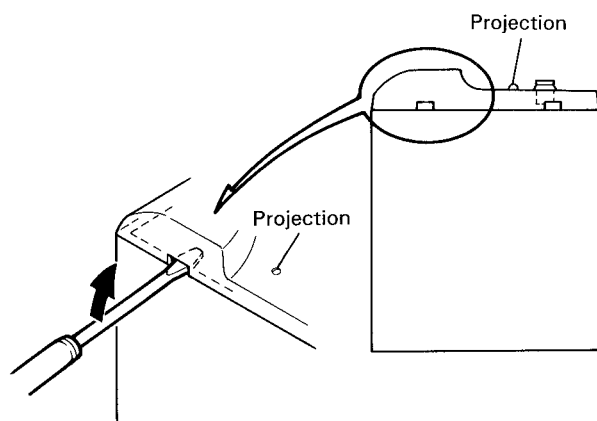


Fig. 7-26

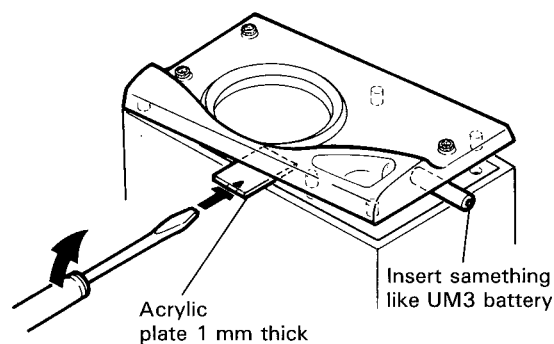


Fig. 7-27

4. Insert an ordinary (—) screwdriver into the left hole shown in Fig. 7-26 and set its edge just under the small projection. Keeping this position, slowly turn the screwdriver to push the front panel gently upward with care as described in the above note.
5. When there is a gap between the front panel and the speaker box, insert something like a UM-3 battery into it as shown in Fig. 7-26.
6. Next, insert an acrylic plate of 1 mm thick or so into the gap aiming at the center boss on the left side of the front panel.
7. In order to prevent the front panel from damage, insert an ordinary screwdriver between the front panel and the acrylic plate as shown in Fig. 7-26, then lift the front panel upward using the front baffle plate as a fulcrum.
8. Repeat the above steps 4 through 7 aiming at different bosses to remove the front panel.
9. For removing the speaker unit, remove four screws ④ for the full range speaker ⑨.

8 Main Adjustment

■ Equipment and Measuring Instrument used for Adjustment

Electronic voltmeter
Audio frequency oscillator
Attenuator
Wow-flutter meter
Frequency counter

Standard signal generator
Torque testing cassette gauge CTG-N
Alignment tape
Measuring tape: Normal ... TS-8 (UR)
Chrome ... AC513
VTT702 (8 kHz)

■ Condition for Measurement: Tuner Sections

Supply voltage : 230 V AC (50/60 Hz) ... UX-A3E/G/GI/EN
240 V AC (50/60 Hz) ... UX-A3B

Applied voltage

of the Tuner : 5.6 V DC

Connect a 47 Ω resistor in series with the power supply.

Reference output: Speaker; 50 mW (0.63 V)/8 Ω
Headphone; 0.06 V/32 Ω

Reference input: TPIN - 11 dBs

Input signal : (AM) Modulation frequency; 400 Hz, 30%
(FM) Modulation frequency; 400 Hz,
22.5 kHz dev.

Set position of

Volume & Switch : BASS/TREBLE; to Center
FM; Stereo
TIMER; OFF
Main Volume; 0 dBs output
BEAT Cut; Standard
Active Hyper Bass; OFF
DOLBY; OFF

Attentive point

Connection of IF sweeper :

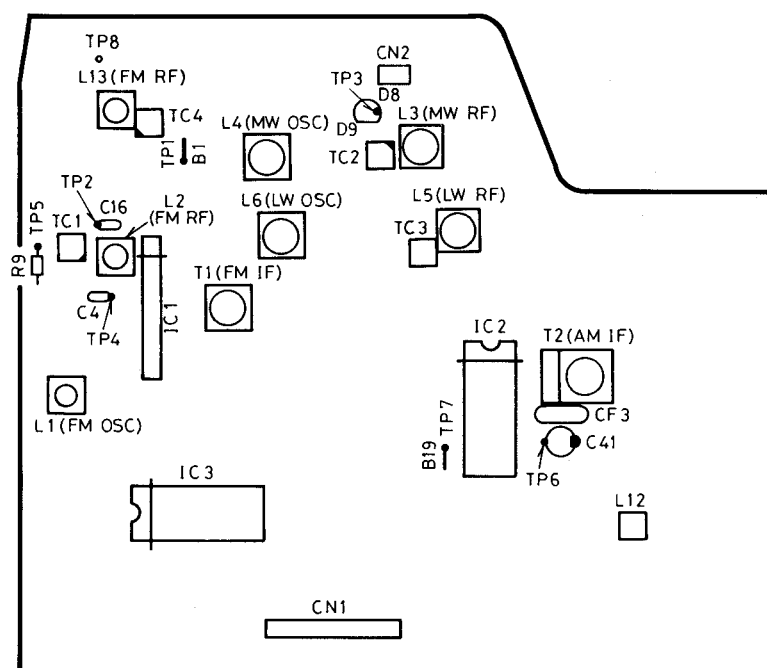
Connect a 30 pF capacitor and a 33 k Ω resistor in series with the sweeper's output and a 0.082 μ F capacitor and a 100 k Ω resistor in parallel to the input.

IF sweeper's output level: Set at the lowest level that will allow adjustment.

FM MPX adjustment:

For this adjustment, connect a 100 k Ω resistor in series with the frequency counter's input.

■ Location of Adjustment (Tuner P.C. Board View)



- L5, L6 TC3 E/B/G Version only.
- L12, L13, TC4, TP8 G Version only.
- TC1 G Version only.

Fig. 8-1

■ Main Adjustment: Tuner Section

Item	Measuring Conditions and Main Adjustment	Standard Value	Adjust
FM IF adjustment	<p>The unit should not usually require adjustment. Follow the steps below when adjustment is necessary.</p> <p><Conditions></p> <ol style="list-style-type: none"> 1. Radio band : FM position 2. Frequency of sweep generator: 10.7 MHz 3. Tuning dial setting: Low end 4. Signal input: Positive side to TP4 5. Measuring point: Positive side to TP6 Negative side to TP7 <div data-bbox="691 540 1412 785" data-label="Diagram"> </div> <p><Adjustment></p> <ol style="list-style-type: none"> 1. Disconnect CF3 to change waveform from S-Curve to single peak of the waveform. 2. Turn T1 to shape waveform so that it peaks in the center (10.7 MHz) of the waveform and is symmetrical in both sides. 3. Connect at CF3 again and confirm that waveform returns to the original. <div data-bbox="1047 863 1212 985" data-label="Figure"> </div>		T1
MW IF adjustment	<p>The unit should not usually require adjustment. Follow the steps below when adjustment is necessary.</p> <p><Conditions></p> <ol style="list-style-type: none"> 1. Radio band: MW position 2. Frequency of signal generator: 450 kHz 3. Tuning dial setting: Low end 4. Signal input: Bar antenna or positive side to TP3 5. Measuring point: Headphone jack or Positive side to TP6 Negative side to TP7 <div data-bbox="545 1385 1420 1587" data-label="Diagram"> </div> <p><Adjustment></p> <ol style="list-style-type: none"> 1. Adjust T2 obtain symmetrical curve and maximum amplitude. 2. On the AM IF Circuit in case where IF filter was used solid units there is unnecessary for IF turning and IF character depend upon the ceramic filter unit. <div data-bbox="1047 1655 1232 1776" data-label="Figure"> </div> <div data-bbox="1047 1796 1219 1889" data-label="Figure"> </div>		T2

Item	Measuring Conditions and Main Adjustment	Standard Value	Adjust
LW tracking adjustment	<p><Conditions></p> <ol style="list-style-type: none"> Radio band: LW position Signal input: Loop antenna Frequency of signal generator: <ul style="list-style-type: none"> 144 kHz (Tuning dial setting: low end) 288 kHz (Tuning dial setting: high end) 144 kHz (Tuning dial setting: 144 kHz) 288 kHz (Tuning dial setting: 290 kHz) Measuring point: Headphone jack <div data-bbox="686 485 1459 668" data-label="Diagram"> </div> <p><Adjustment></p> <ol style="list-style-type: none"> Receive 144 MHz signal and adjust L6 to Obtain 1.1 ± 0.02 V at TP5. Receive lower frequency 144 kHz at maximum variable capacitor position. Adjust L5 so that output level becomes maximum. Receive upper frequency tracking lower frequency 288 kHz at minimum variable capacitor position. Adjust TC3 so that output level becomes maximum. Repeat the above step 2,3 through 4,5. <div data-bbox="1103 683 1204 712" data-label="Caption">Fig. 8-6</div> <div data-bbox="1086 793 1251 889" data-label="Figure"> </div> <div data-bbox="1114 917 1215 946" data-label="Caption">Fig. 8-7</div> <div data-bbox="1368 806 1411 834" data-label="Text">L3</div> <div data-bbox="1361 893 1422 921" data-label="Text">TC3</div>		
MW tracking adjustment	<p>The unit should not usually require adjustment. Follow the steps below when adjustment is necessary.</p> <p><Conditions></p> <ol style="list-style-type: none"> Radio band: MW position Signal input: Loop antenna Frequency of signal generator: <ul style="list-style-type: none"> 603 kHz (Tuning dial setting: 600 kHz) 1403 kHz (Tuning dial setting: 1400 kHz) Measuring point: Headphone jack <div data-bbox="686 1372 1459 1557" data-label="Diagram"> </div> <p><Adjustment></p> <ol style="list-style-type: none"> Receive lower frequency 603 kHz and adjust L3 so that output level becomes maximum. Receive tracking upper frequency 1404 kHz and adjust TC2 so that output level becomes maximum. Repeat the above step 1. through 2. so that output becomes maximum. <div data-bbox="1111 1564 1212 1596" data-label="Caption">Fig. 8-8</div> <div data-bbox="1086 1651 1251 1747" data-label="Figure"> </div> <div data-bbox="1114 1764 1216 1796" data-label="Caption">Fig. 8-9</div> <div data-bbox="1368 1634 1412 1661" data-label="Text">L3</div> <div data-bbox="1361 1751 1422 1781" data-label="Text">TC2</div>		

Item	Measuring Conditions and Main Adjustment	Standard Value	Adjust
FM tracking adjustment (UX-A3 E/B) only	<p><Conditions></p> <ol style="list-style-type: none"> Radio band: FM position Signal input: 75 Ω unbalance Positive side to TP1 Negative side to TP2 Frequency of signal generator: 88 MHz (Tuning dial setting: 90 MHz) 106 MHz (Tuning dial setting: 106 MHz) Measuring point: Headphone jack <div data-bbox="627 500 1419 680" data-label="Diagram"> </div> <p><Adjustment></p> <p>Receive tracking lower frequency 88 MHz and adjust L1 so that output level becomes maximum.</p>	<p>Fig. 8-10</p>	<p>L1</p>
FM tracking adjustment (UX-A3 G) only	<p><Conditions></p> <ol style="list-style-type: none"> Radio band: FM Signal input: 75 Ω unbalance Positive side to TP1 Negative side to TP2 Frequency of signal generator: 87.5 MHz (Tuning dial setting: low end) 108.3 MHz (Tuning dial setting: high end) 90 MHz (Tuning dial setting: 90 MHz) 106 MHz (Tuning dial setting: 106 MHz) Measuring point: Headphone jack <div data-bbox="627 1202 1419 1383" data-label="Diagram"> </div> <p><Adjustment></p> <ol style="list-style-type: none"> Receive 87.5 MHz signal and adjust L1 to obtain 1.3 ± 0.02 V at TP5. Receive lower frequency 87.5 MHz at maximum variable capacitor position. Adjust L2 so that output level becomes maximum. Receive upper frequency 108 MHz at minimum variable capacitor position. Adjust L2 and L13 so that output level becomes maximum. Adjust the above adjust (L2 & L13) repeatedly so that the tuner can be received above frequency range (band width). Receive tracking lower frequency 98 MHz and adjust TC1 so that output level becomes maximum. Receive tracking upper frequency 106 MHz and adjust TC4 so that output level becomes maximum. Adjust the above adjust (TC1 & TC4) repeatedly so that the tuner can be obtained the best sensitivity. 	<p>Fig. 8-11</p>	<p>L1 L2, L13 TC1 TC4</p>

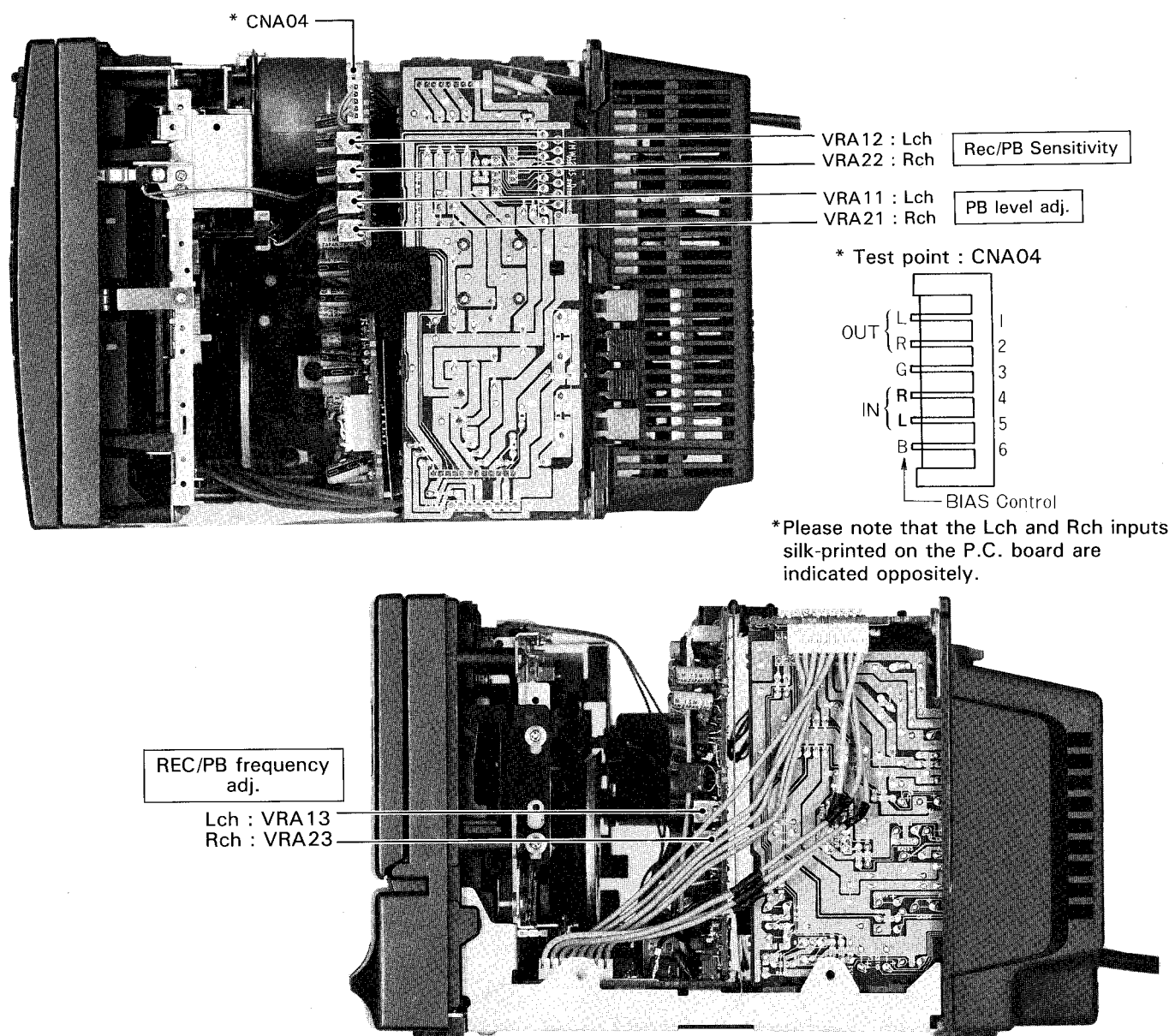
Item	Measuring Conditions and Main Adjustment	Standard Value	Adjust
FM MPX confirmation	<p><Conditions></p> <ol style="list-style-type: none"> 1. Radio band: FM position 2. Signal input: 75 Ω unbalance Positive side to TP1 Negative side to TP2 3. Frequency of signal generator: 98 MHz 4. Output level of signal generator: 60 dBμV <p><Confirmation></p> <p>Confirm that stereo operation and frequency separation meet the specifications.</p>	19 \pm 0.1 kHz	—

■ Main Adjustment: Mechanism and Amplifier Sections

Item	Measuring Conditions and Main Adjustment	Standard Value	Adjust
Head azimuth adjustment	<p><Conditions></p> <ol style="list-style-type: none"> 1. Mode : PLAY 2. Test tape : VTT703 (10 kHz) 3. Measuring point : Headphone <p><Adjustment></p> <ol style="list-style-type: none"> 1. Connect an electronic voltmeter to the speaker terminal. 2. Playback the test tape VTT702. 3. Adjust the head azimuth with screw until the reading of the electronic voltmeter becomes - 2 dB from the peak. 4. Adjust to peak between FWD/REV within - 3 dB from the peak. 	- 2 dB from the peak	
Tape speed and wow-flutter confirmation	<p><Conditions></p> <ol style="list-style-type: none"> 1. Mode : PLAY, Normal speed 2. Test tape : VTT712 at tape end 3. measuring point : Headphone jack <p><Confirmation></p> <ol style="list-style-type: none"> 1. Connect a wow-flutter meter to speaker terminal. 2. Playback the test tape VTT712 at tape end. 3. Confirm so that is obtained within 2940 ~ 3090 Hz at normal speed. 4. Check to see if reading of the meter is less than 0.45% (JIS RMS). 	<p>Normal Speed : 2940 ~ 3090 Hz</p> <p>Wow-flutter : less than 0.45% (JIS RMS)</p>	—
Playback frequency response confirmation	<p><Conditions></p> <p>Test tape : VTT739 Mode : PLAY Measuring point : CNA04 connector on the pre amplifier P.C. board</p> <p><Confirmation></p> <p>Playback the test tape VTT739 difference level against 1 kHz.</p> <p>1 kHz/63 Hz : - 2 dB\pm within 4 dB 1 kHz/12.5 kHz : 0 dB\pm within 4 dB</p>	<p>1 kHz/63 Hz : - 2 dB\pm within 4 dB</p> <p>1 kHz/12.5 kHz : 0 dB\pm within 4 dB</p>	—
Recording and playback frequency response adjustment	<p><Conditions></p> <ol style="list-style-type: none"> 1. Test tape : UR(TS8) 2. Measuring point : CNA04 IN 4 PIN (Lch)/5 PIN (Rch) OUT ... 1 PIN (Lch)/2 PIN (Rch) <p><Adjustment></p> <ol style="list-style-type: none"> 1. Reference signal - 11 dB to be applied to CNA04. 2. Adjust the VRA13(Lch) and VRA23(Rch) so that 25 Hz ~ 12.5 kHz frequency response level becomes 0\pm1 dB. 	0 \pm 1 dB	Lch : VRA13 Rch : VRA23

Item	Measuring Conditions and Main Adjustments	Standard Value	Adjust
Playback output level adjustment	<p>< Conditions > Measuring point : CNA04 OUT ... 1 PIN (Lch) 2 PIN (Rch)</p> <p>< Adjustment > Adjust the VRA11 (Lch) and VRA21 (Rch) so that 1 kHz against monitor level becomes $-11 \text{ dB} \pm 1 \text{ dB}$.</p>	$11 \text{ dB} \pm 1 \text{ dB}$	Lch : VRA11 Rch : VRA21
Rec./playback sensitivity adjustment	<p>< Conditions > 1. Mode: REC, PLAY Mechanism B 2. Test tape: UR (TS8) 3. Measuring point: CNA04 IN 4 PIN (Lch)/5 PIN (Rch) OUT ... 1 PIN (Lch)/2 PIN (Rch)</p> <p>< Adjustment > Adjust the VRA12 (L ch) and VRA22 (R ch) so that 1 kHz -6 dBs against monitor level becomes $0 \pm 1 \text{ dB}$.</p>	$0 \pm 1 \text{ dB}$	L ch : VRA11 R ch : VRA22

■ Location of Adjustment



■ Adjust of CD Player Section

Items	Devices Used	Adjustment Method	Adjusting Position
Adjustment of tracking offset	Normal disk oscilloscope	<ol style="list-style-type: none"> 1. Connect the oscilloscope between TP502 (VREF) and TP503 (TE). 2. Connect the terminal ① and ④ of FW501 and apply 10 V to the terminal ② of FW501. 3. Replay (Regenerate) the normal disk. 4. Connect TP504 and TP502 (for shorting). 5. Adjust (the tracking offset waveform with) VR501 so that the DC level of tracking error signal (waveform of oscilloscope) becomes zero. <div style="text-align: center;"> <p>Waveform of tracking offset</p> <p>Align the P-P center to the DC level: "0".</p> <p>Fig. 8-14</p> </div> <p>Notes</p> <ol style="list-style-type: none"> 1. Adjust VR501 so that the waveform becomes vertically symmetrical with reference to the zero level. 2. The oscilloscope input should be coupled to DC. 	VR501

■ Layout Diagram of Adjusting Positions

(CD Control P.C. board View)

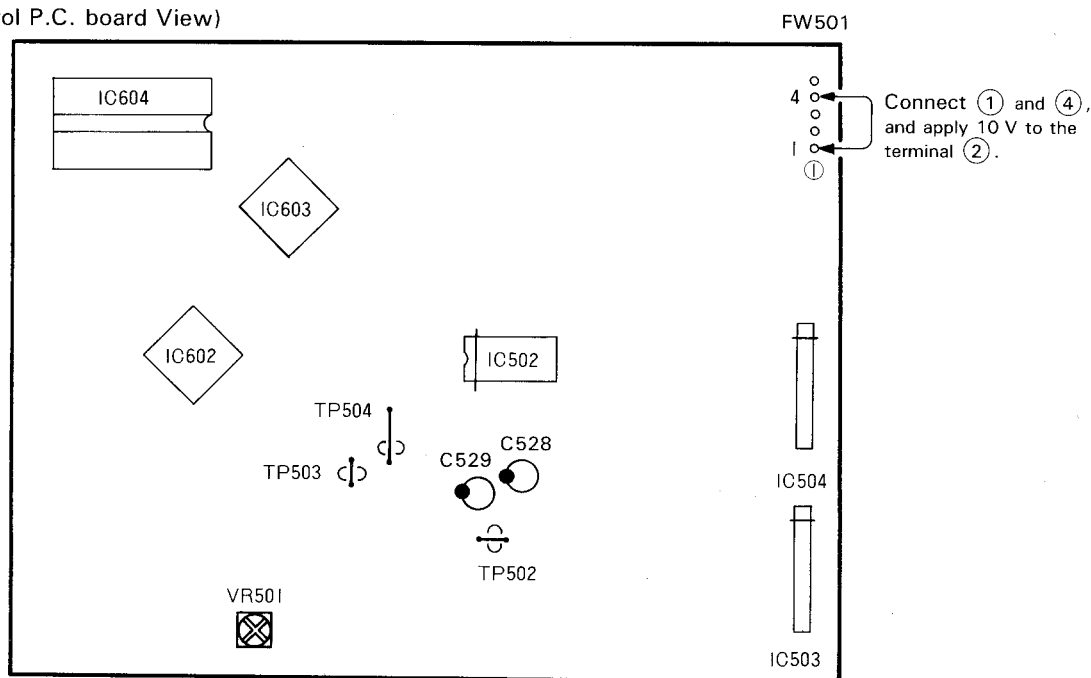


Fig. 8-15

9 Block Diagram

■ General Section

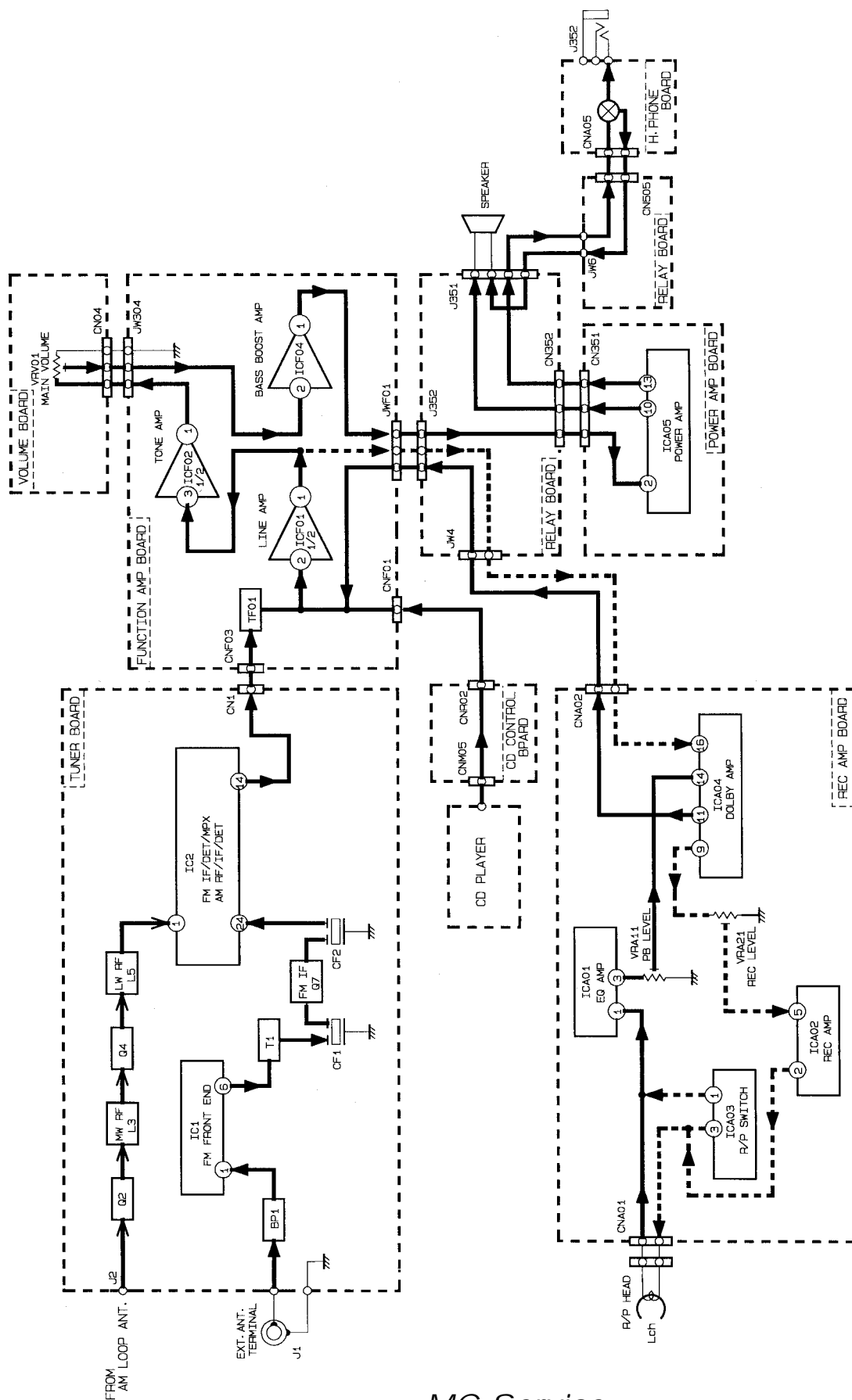


Fig. 9-1

CD Player Sections

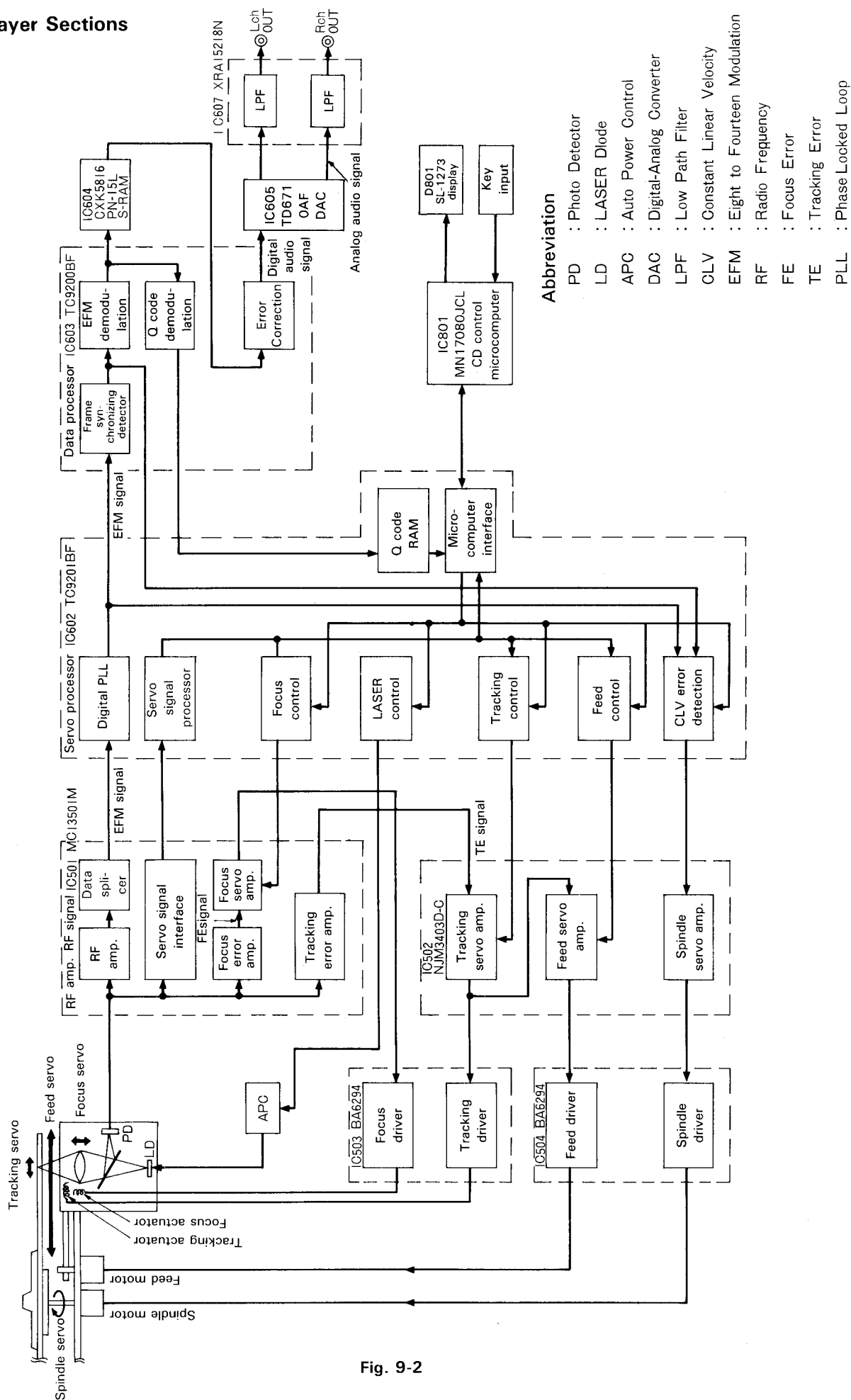


Fig. 9-2

10 Wiring Connections

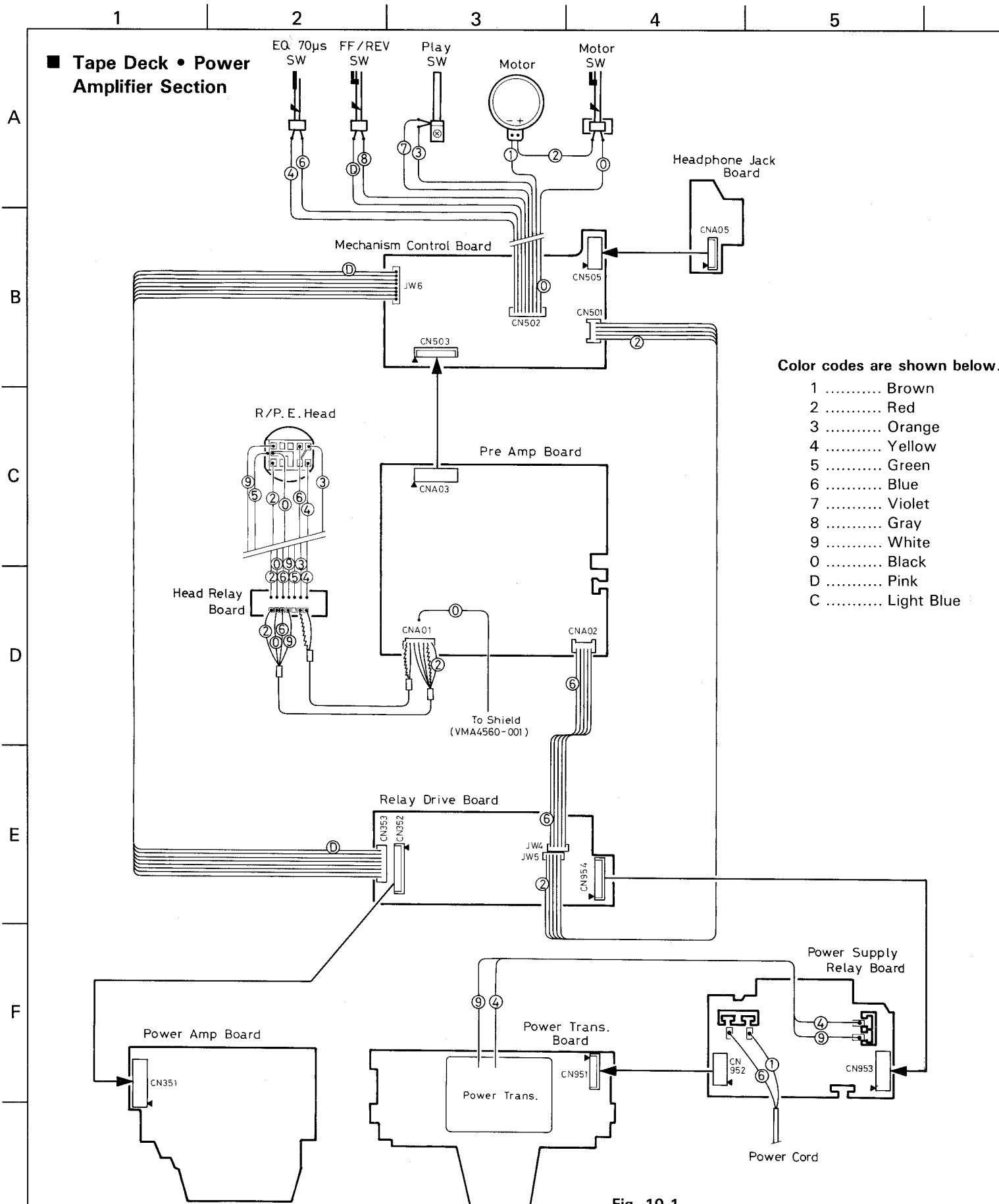


Fig. 10-1

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■ CD • Receiver Section

e shown below.

Brown
Red
Orange
Yellow
Green
Blue
Violet
Gray
White
Black
Pink
Light Blue

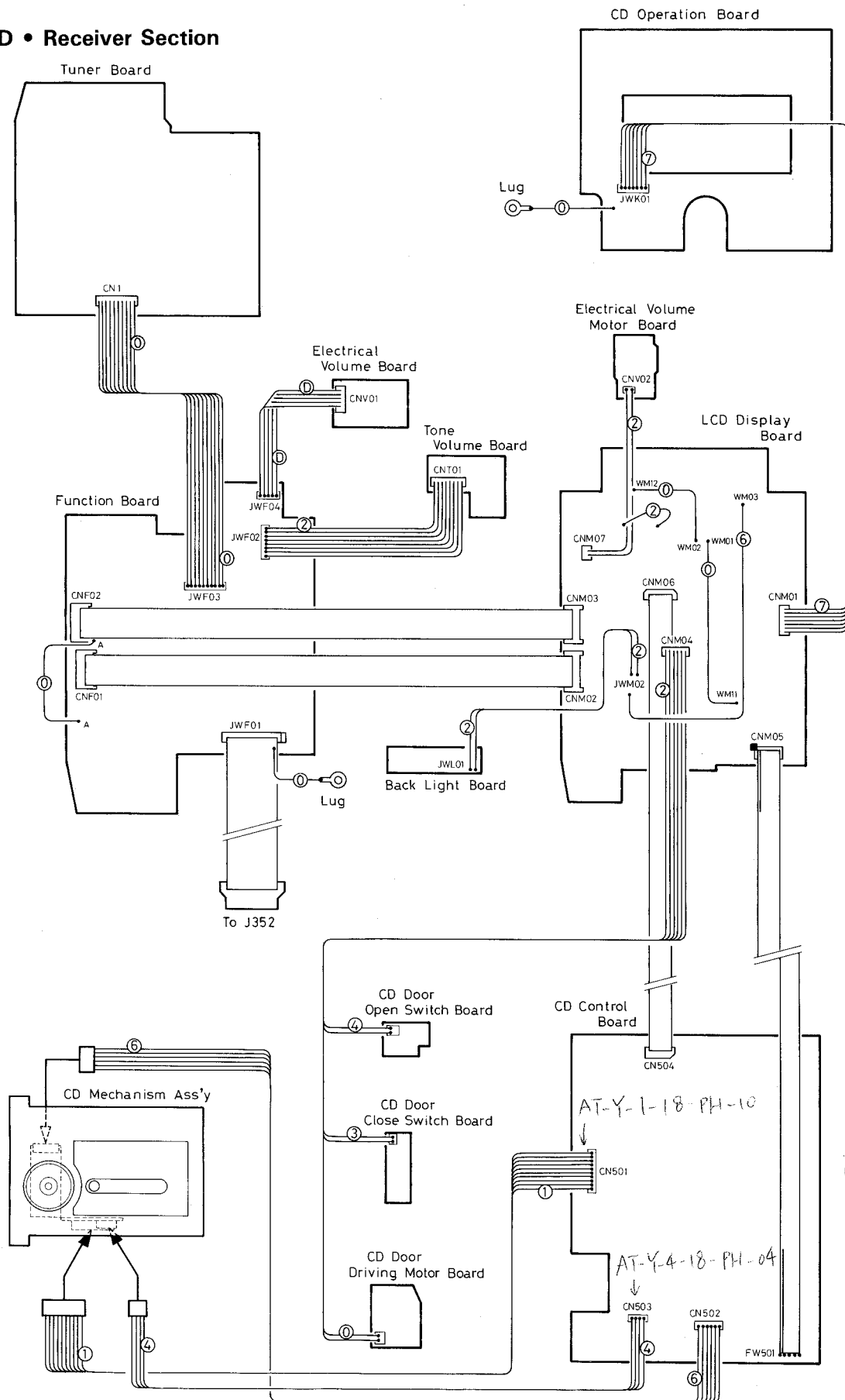


Fig. 10-2

11 Standard Schematic Diagram and Location of

Head Amplifier/Mechacon Circuit: Drawing No. VDH9189-006AV

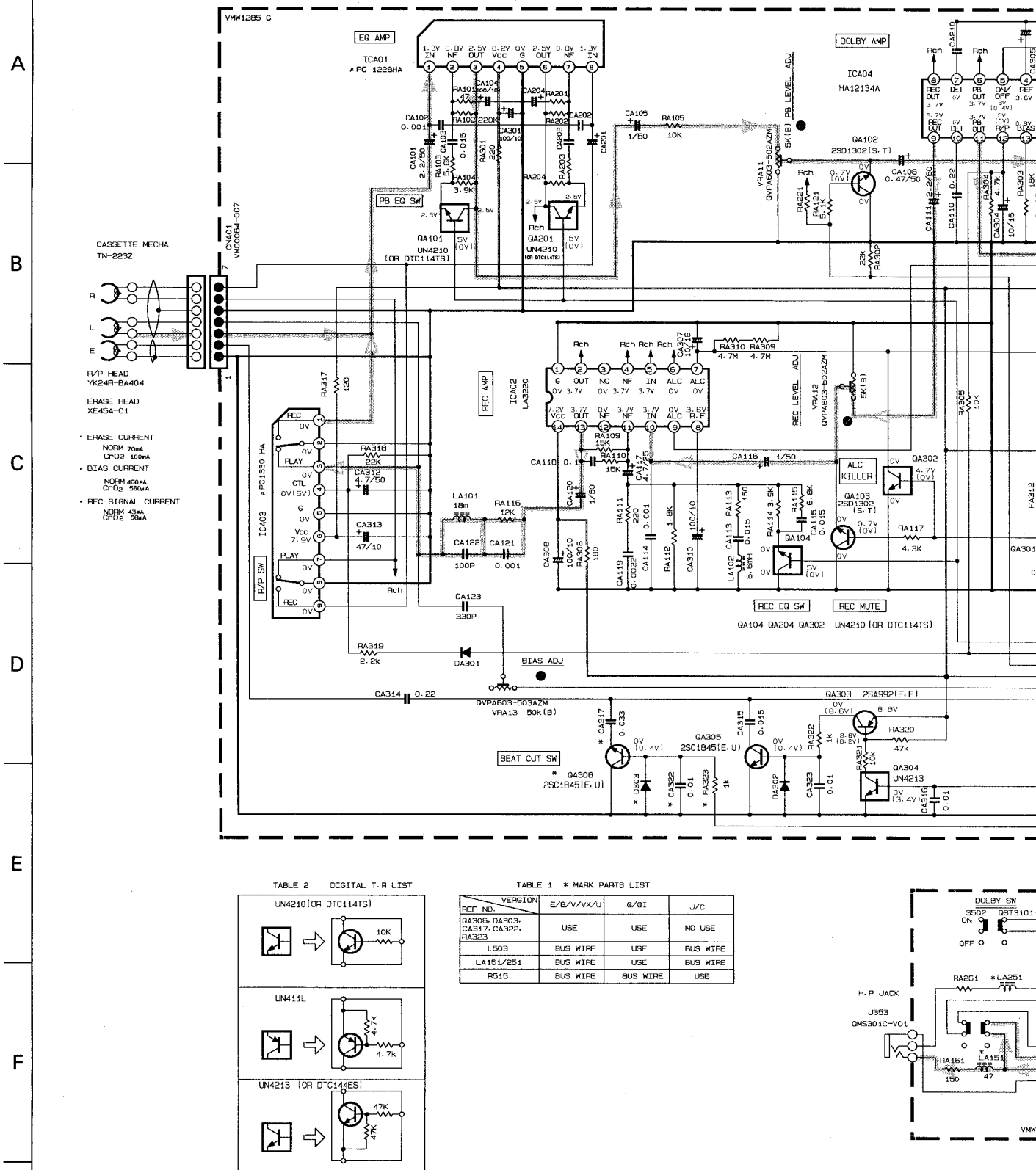


Fig. 11-1

ation of P.C. Board

5

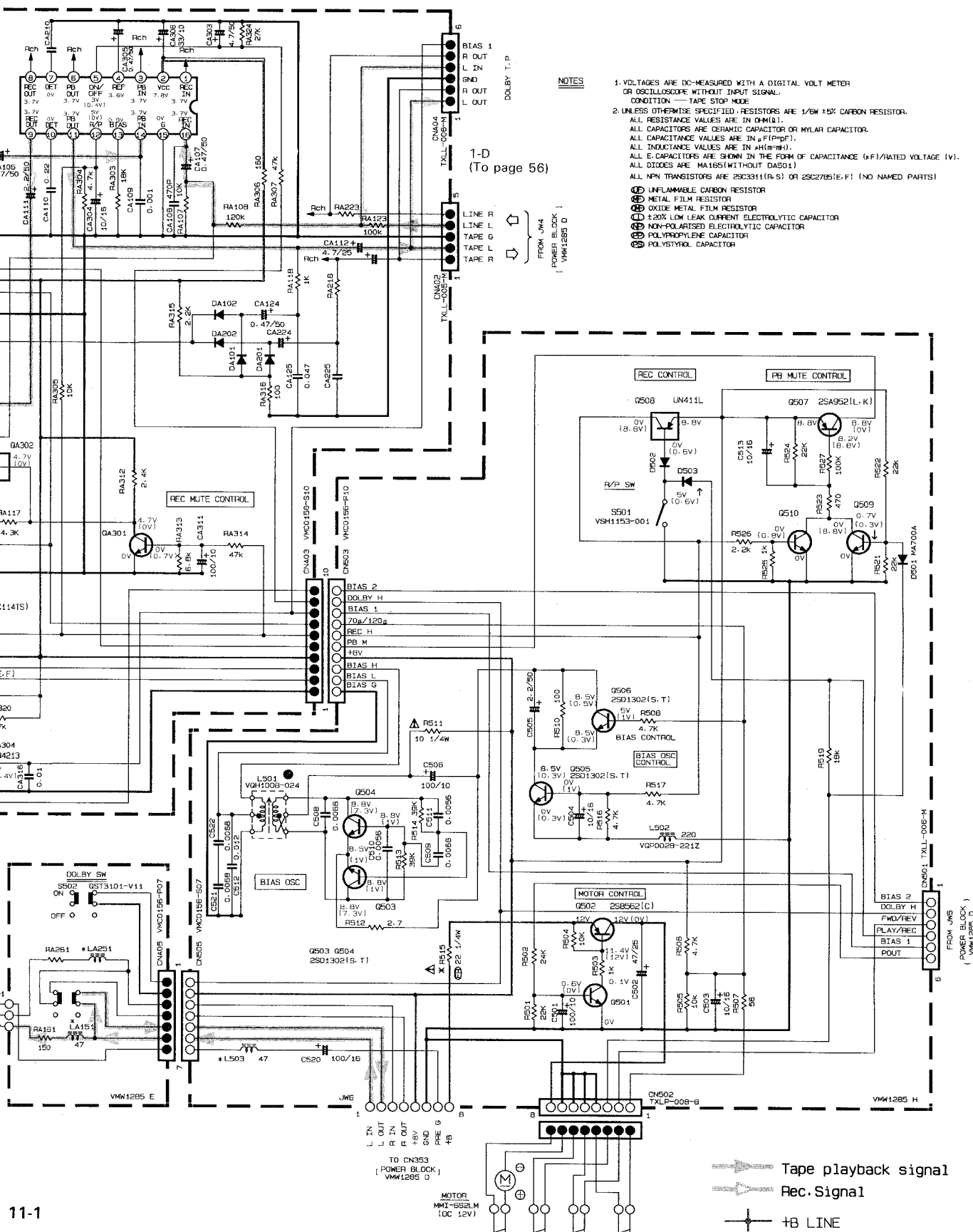
6

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• Mechacon P.C. Board: Drawing No. VMW1285H

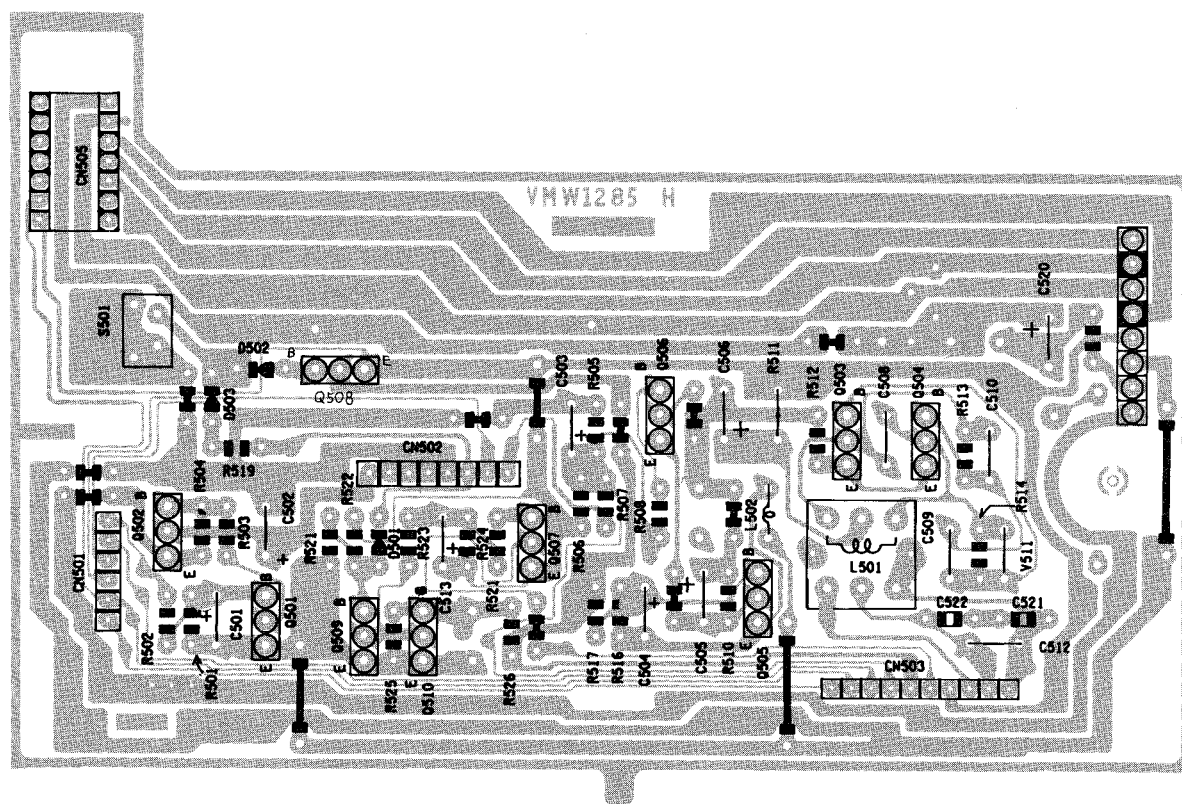


Fig. 11-3

• Headphone P.C. Board: Drawing No. VMW1285E

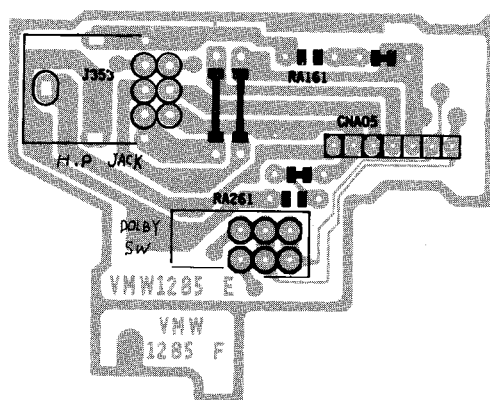
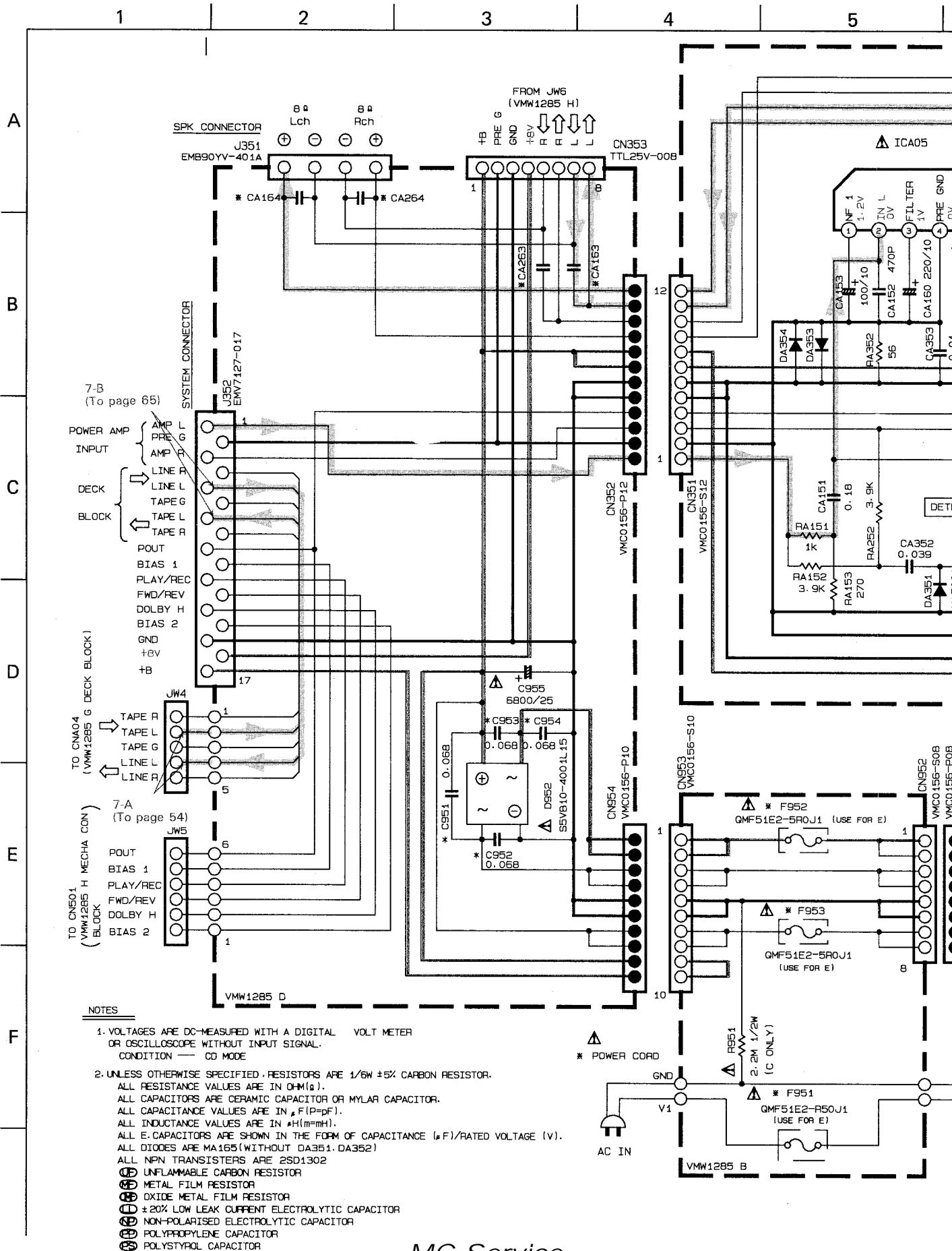


Fig. 11-4

■ Power Amplifier • Power Supply Circuit: Drawing No. VDH9189-005AW



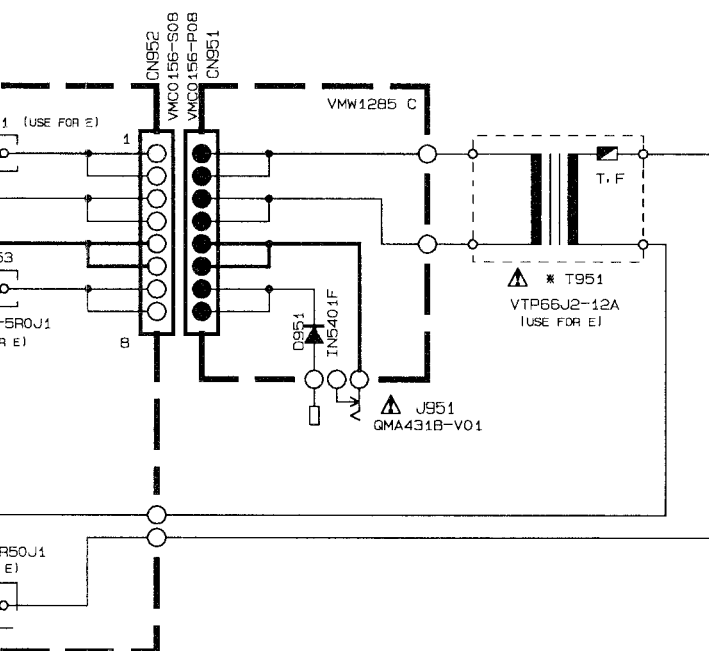
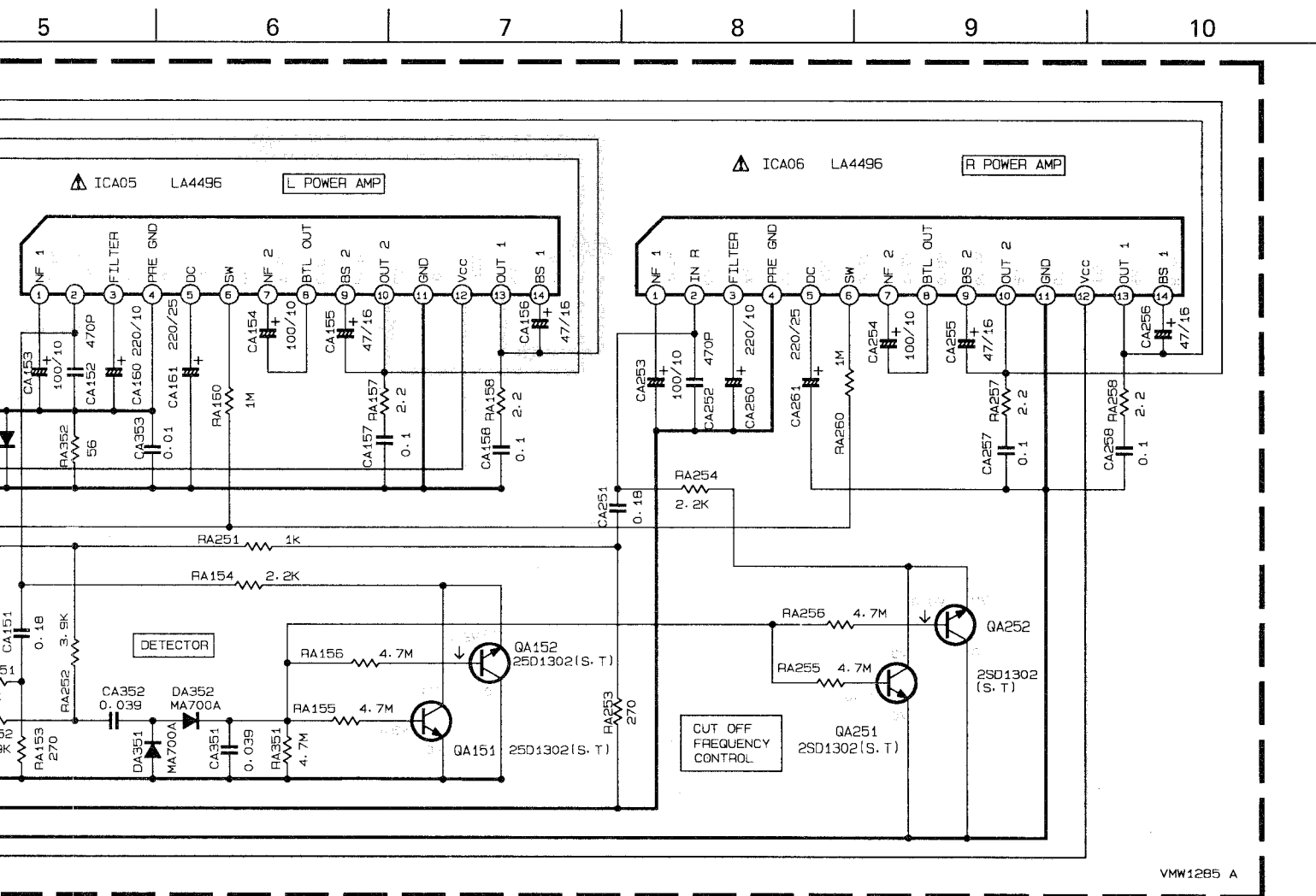


Fig. 11-5

TABLE 1 *MARK LIST

MODEL REF	E/V/VX	B	G/GI	C
T951	VTP66J2-12A	VTP66T2-12A(BS)	VTP66J2-12A	VTP66A2-12C
F951	QMF51E2-R50J1	QMF51E2-R50J1	QMF51E2-R50J1	QMF51N2-R50J1
F952	QMF51E2-5R0J1	QMF51E2-5R0J1	QMF51E2-5R0J1	QMF0007-5R0J1
F953	QMF51E2-5R0J1	QMF51E2-5R0J1	QMF51E2-5R0J1	QMF0007-5R0J1
F954	NO USE	NO USE	NO USE	NO USE
V1	230V	240V	230V	120V
C951 C954	0.068	0.068	0.058	0.022
POWER CORD	GMP3900-200	GMP9017-008(BS)	GMP3900-200	GMP1340-200
CA163 CA263	NO USE	NO USE	120P	NO USE
CA164 CA264	NO USE	NO USE	120P	NO USE

Tape playback Signal

+B LINE

Fig. 11-6

Fig. 11-7

16

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• Power Supply-Relay P.C. Board: Drawing No. VMW1285D

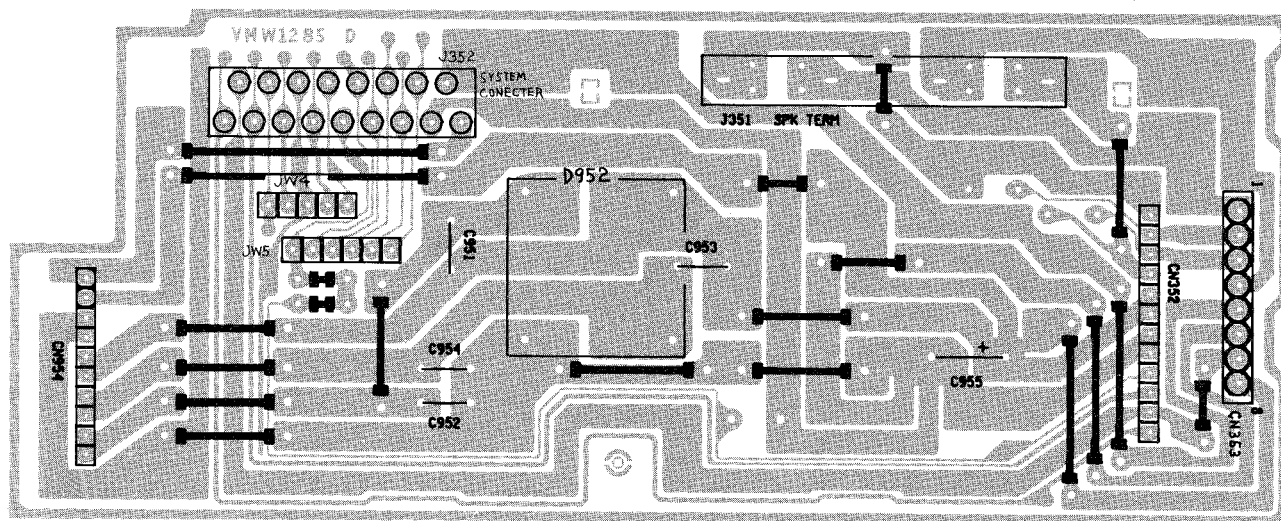


Fig. 11-8

• Power Supply-Speaker Terminal P.C. Board: Drawing No. VMW1285C

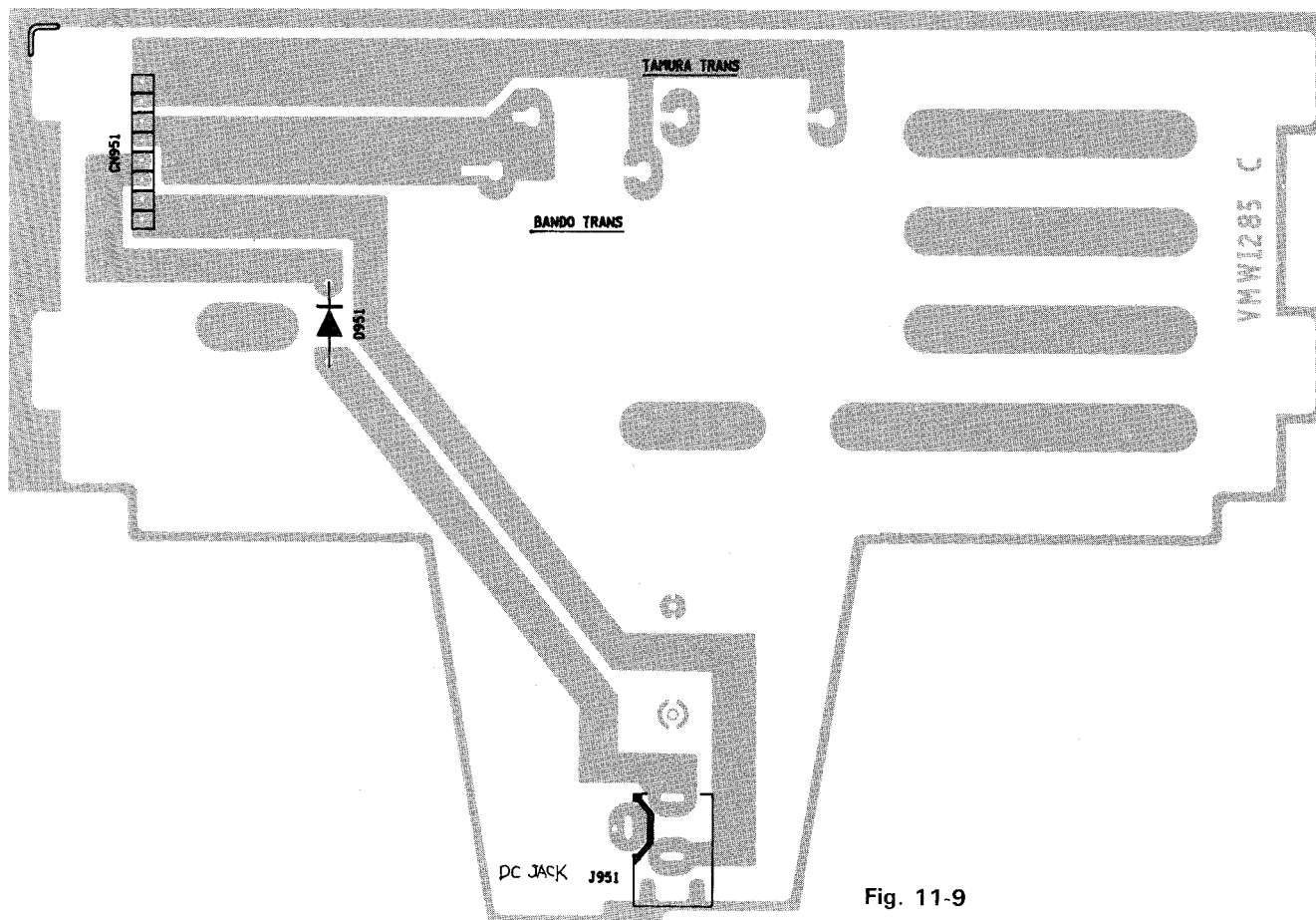
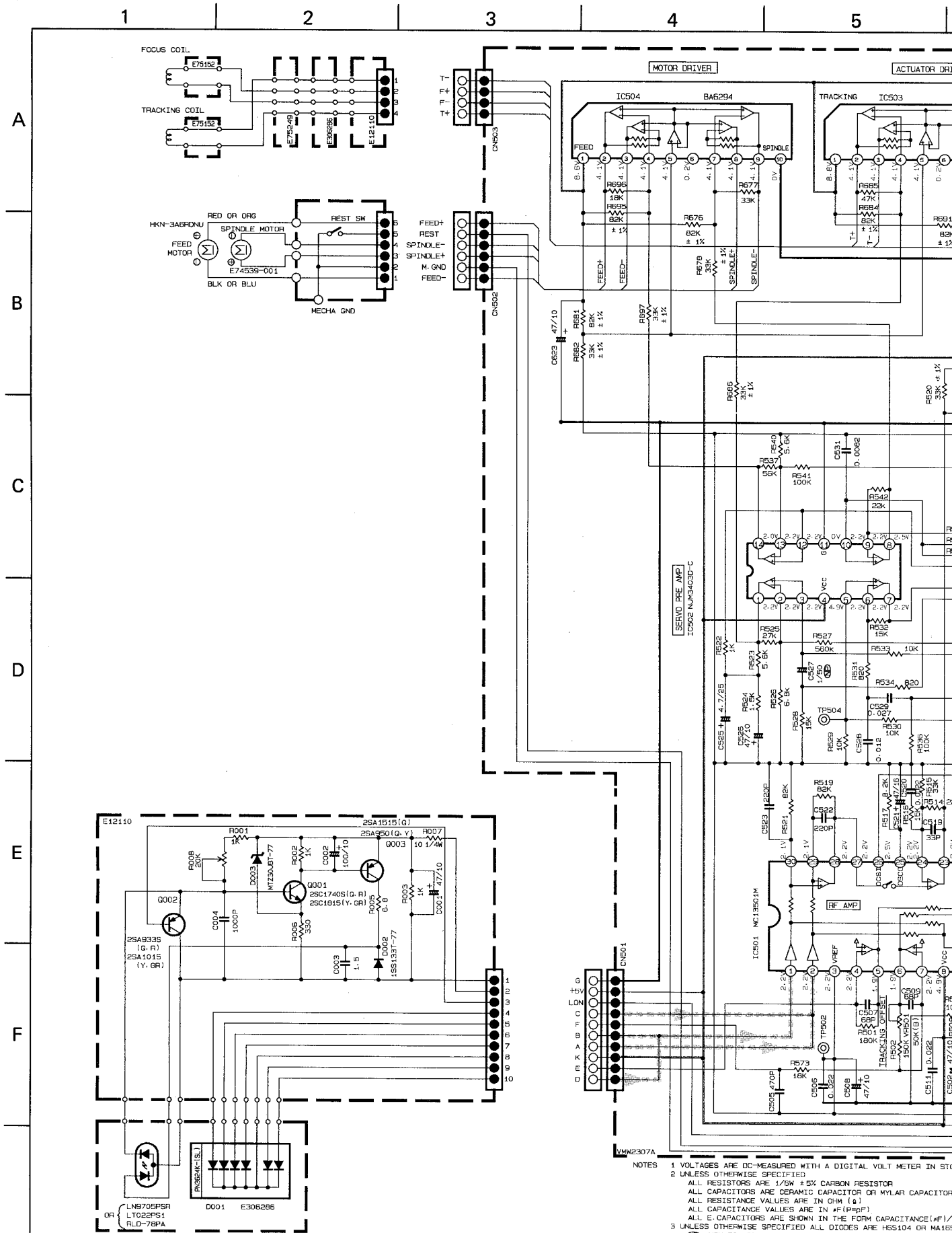
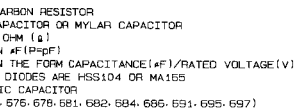


Fig. 11-9

■ CD Control Amplifier Circuit: Drawing No. VDH9189-005CV



- NOTES
- 1 VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER IN STOP MODE
 - 2 UNLESS OTHERWISE SPECIFIED
 - ALL RESISTORS ARE 1/8W ± 5% CARBON RESISTOR
 - ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR
 - ALL RESISTANCE VALUES ARE IN OHM (Ω)
 - ALL CAPACITANCE VALUES ARE IN PICO (pF)
 - ALL E-CAPACITORS ARE SHOWN IN THE FORM CAPACITANCE/(V/F)
 - 3 UNLESS OTHERWISE SPECIFIED ALL DIODES ARE HSS104 OR MA161
- Ⓢ NON-POLARISED ELECTROLYTIC CAPACITOR
 * 1/4W ± 1% CARBON RESISTOR (R520, 675, 678, 681, 682, 684, 686, 687)



MC-Service

+ B LINE

■ CD Control Amplifier P.C. Board: Drawing No. VMW2307

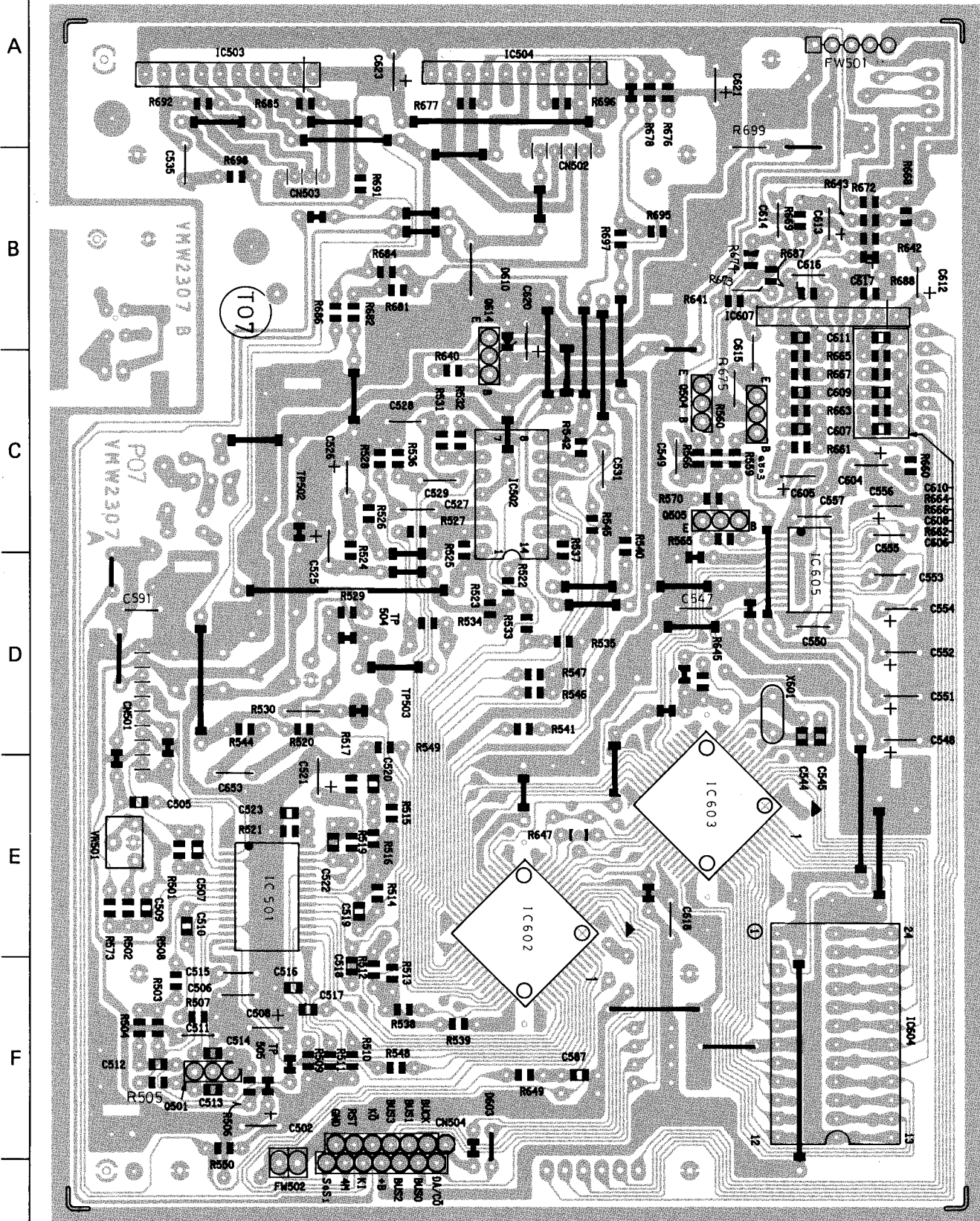


Fig. 11-11

MC-Service

LCD Display/Function P.C. Board: Drawing No. VMW2353

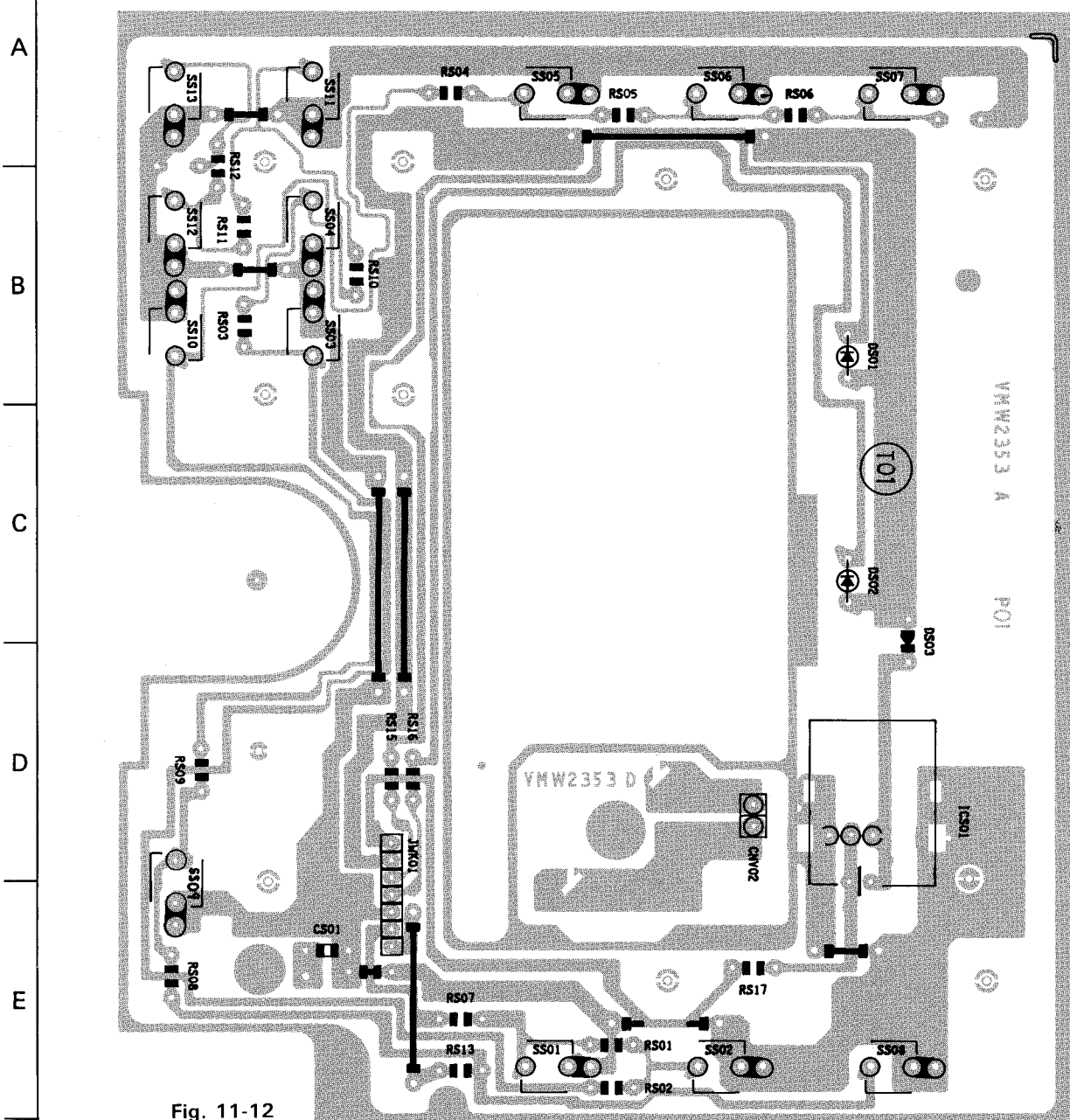


Fig. 11-12

Main Volume P.C. Board : Drawing No. VMW2353C

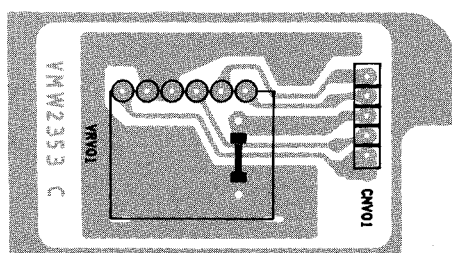


Fig. 11-13

Tone Volume P.C. Board : Drawing No. VMW2353B

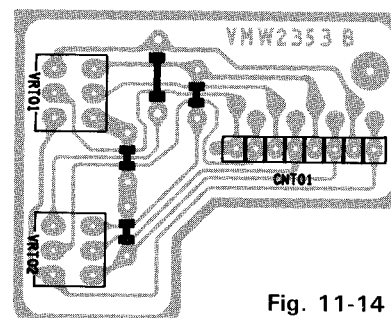


Fig. 11-14

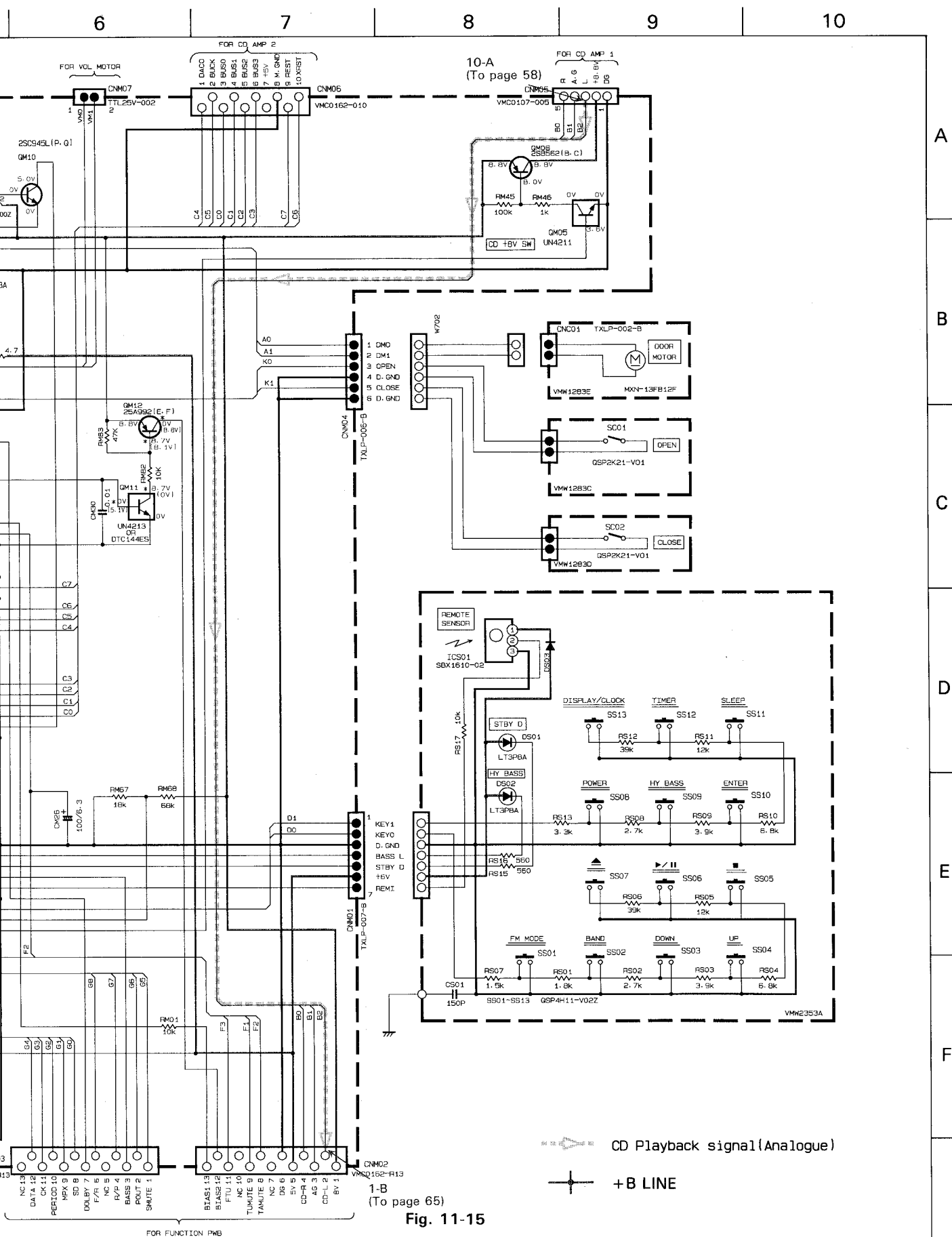


Fig. 11-15

MC-Service

Tuner Circuit: Drawing No. VDH9189-005TW

A

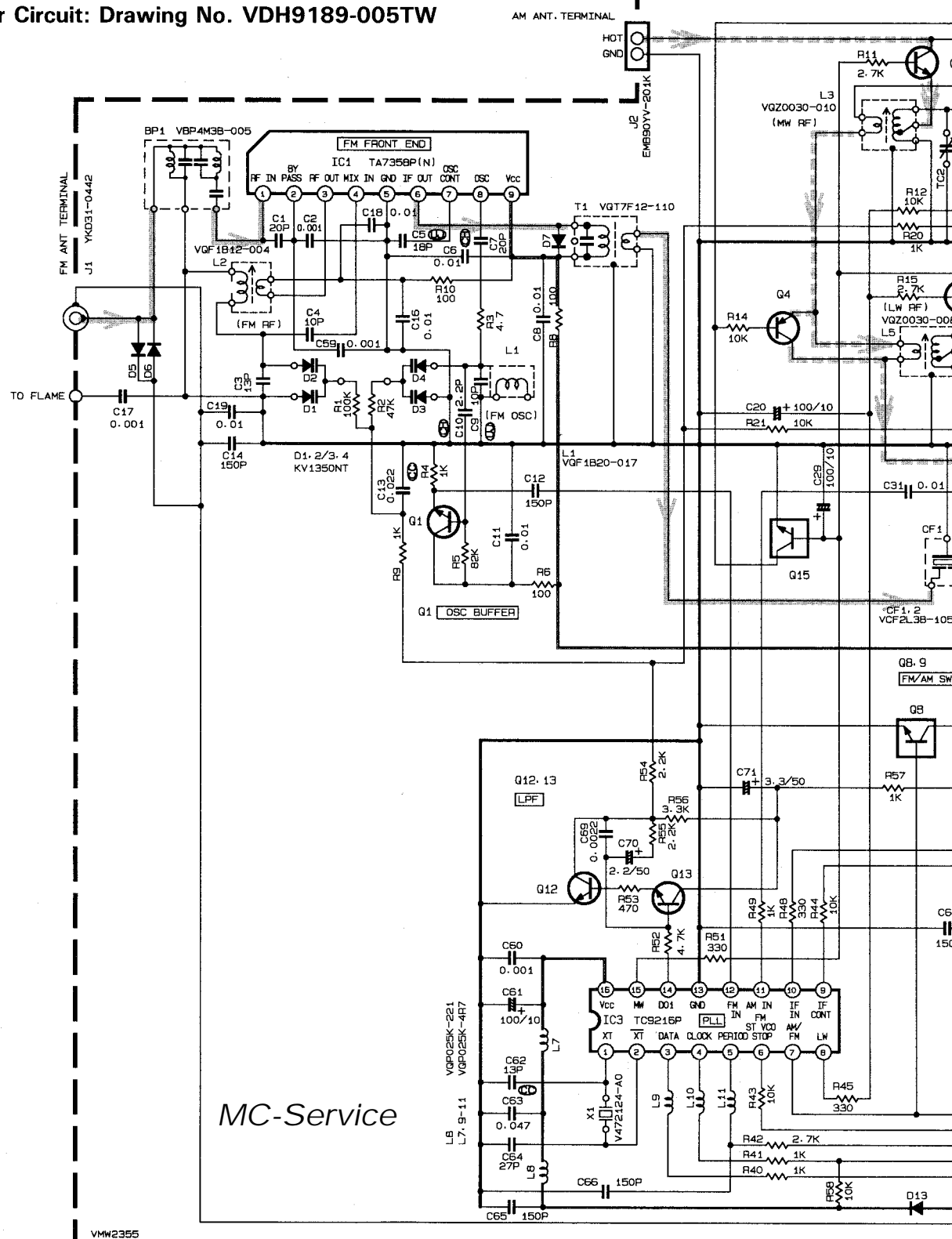
B

C

D

E

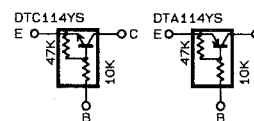
F

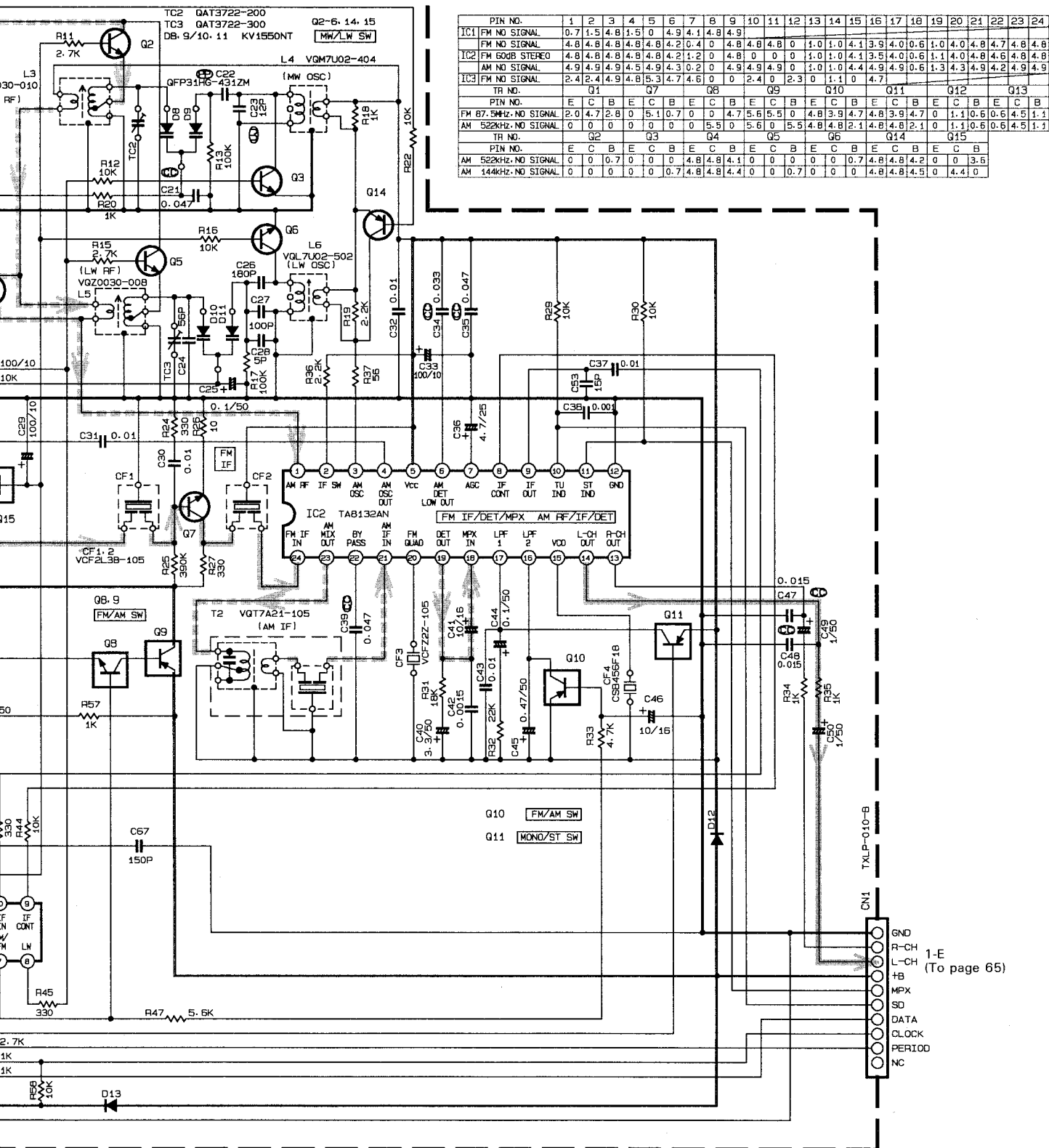


NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
 - ALL RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
 - ALL RESISTANCE VALUES ARE IN OHM (Ω).
 - ALL CAPACITANCE VALUES ARE IN pF (pF).
 - ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
 - SI-DIODES (▶) ARE ALL MA165 THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS 1SS254T OR HSS104TJ.
 - PARTS NO. OF TRANSISTOR ARE AS FOLLOWS.
- | | | | |
|---------------|---------------|--------|---------------|
| Q1 | 2SC1923(O) | Q4, 14 | 2SA1309(R, S) |
| Q6, 8, 12, 13 | 2SC3311(R, S) | Q9-11 | DTA114YS |
| Q3, 7 | 2SC2839(E) | Q2, 5 | 2SD1302(S, T) |
| Q8 | DTC114YN | Q15 | DTC124ES |

B. INSIDE OF DIGITAL TRANSISTORS ARE





DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS:

DTA114YS
DTC124ES

9. LAST NO.
R 58 C 71 Q 15 D 13

BLANK NO.
R 7, 23, 28, 38, 39, 46, 50
C 15, 51, 52, 54-58, 68

MC-Service

AM Radio Signal
FM Radio Signal

+ B LINE

Fig. 11-16

1-E
(To page 65)

■ Tuner P.C. Board: Drawing No. VMW2355

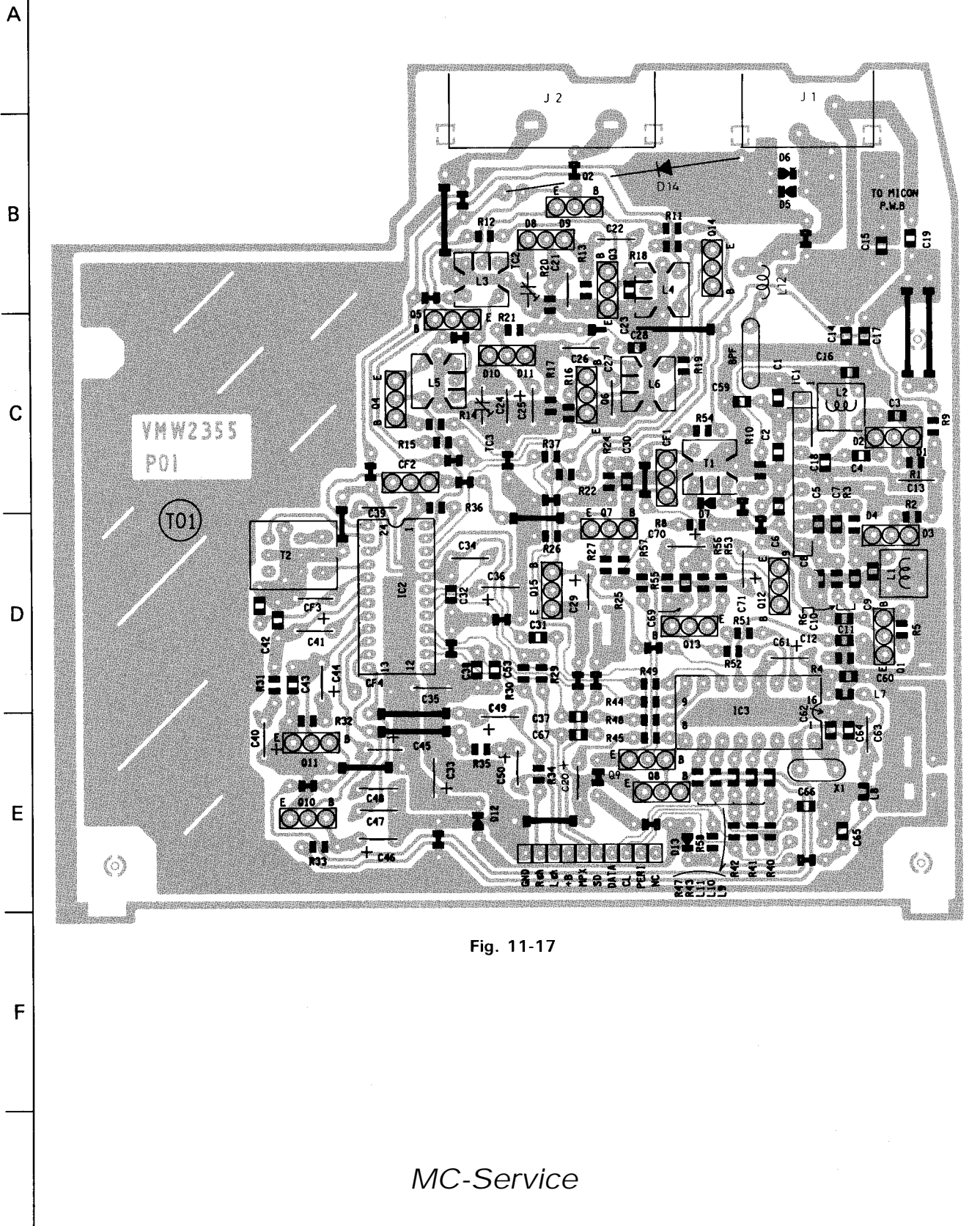


Fig. 11-17

MC-Service

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■ Function/LINE amplifier P.C. Board: Drawing No. VMW1283B

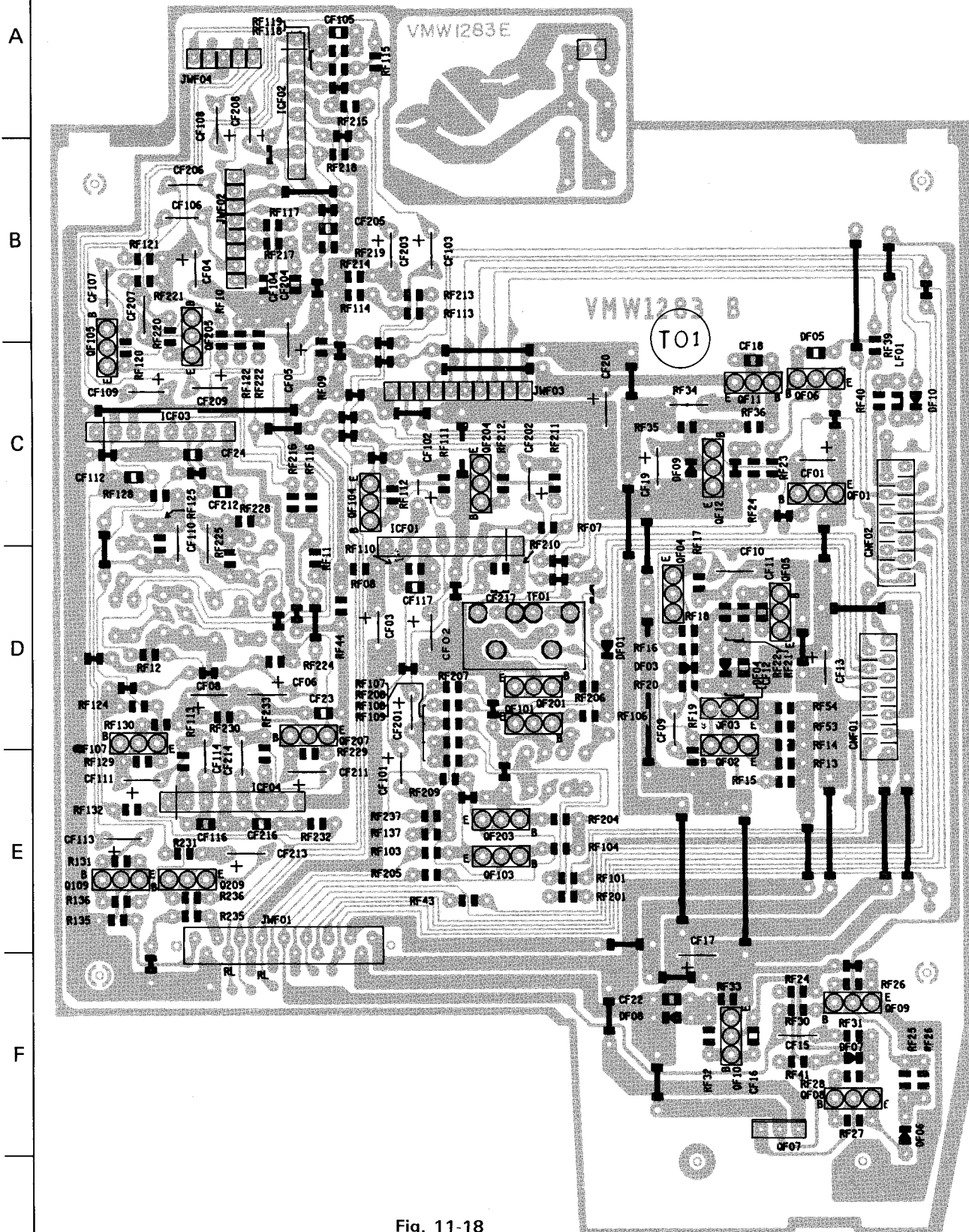
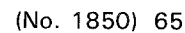


Fig. 11-18

F



12 Electrical Parts List

■ Pre-Amplifier P.C. Board Parts List

BLOCK NO. **M1MM**

A REF.	PARTS NO.	PARTS NAME	REMARKS
C 501	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
C 502	QETC1EM-4762N	E CAPACITOR	47MF 20% 25V
C 503	QETC1CM-1062N	E CAPACITOR	10MF 20% 16V
C 504	QETC1CM-1062N	E CAPACITOR	10MF 20% 16V
C 505	QETC1HM-2252N	E CAPACITOR	2.2MF 20% 50V
C 506	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
C 508	QFLA1HJ-6822M	M CAPACITOR	6800PF 5% 50V
C 509	QFLA1HJ-6822M	M CAPACITOR	6800PF 5% 50V
C 510	QFLA1HJ-3322M	M CAPACITOR	3300PF 5% 50V
C 511	QFLA1HJ-3322M	M CAPACITOR	3300PF 5% 50V
C 512	QFV41HJ-123	FILM CAPACITOR	.012MF 5% 50V
C 513	QETC1CM-1062N	E CAPACITOR	10MF 20% 16V
C 520	QKXB1CM-1072N	E CAPACITOR	100MF 20% 16V
C 521	QKXB1CM-682Y	C CAPACITOR	6800PF 20% 16V
C 522	QKXB1CM-682Y	C CAPACITOR	6800PF 20% 16V
A 951	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
A 952	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
A 953	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
A 954	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
A 955	QETB1EM-688N	E CAPACITOR	6800MF 20% 25V
CA101	QETC1HM-2252N	E CAPACITOR	2.2MF 20% 50V
CA102	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA103	QFV11HJ-1532N	TF CAPACITOR	.015MF 5% 50V
CA104	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA105	QETC1HM-1052N	E CAPACITOR	1.0MF 20% 50V
CA106	QETC1HM-4742N	E CAPACITOR	.47MF 20% 50V
CA107	QETC1HM-4742N	E CAPACITOR	.47MF 20% 50V
CA108	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
CA109	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA110	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA111	QETC1HM-2252N	E CAPACITOR	2.2MF 20% 50V
CA112	QETC1EM-4752N	E CAPACITOR	4.7MF 20% 25V
CA113	QFV11HJ-1532N	TF CAPACITOR	.015MF 5% 50V
CA114	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA115	QCC31EM-1532V	C CAPACITOR	.015MF 20% 25V
CA116	QETC1HM-1052N	E CAPACITOR	1.0MF 20% 50V
CA117	QETC1EM-4752N	E CAPACITOR	4.7MF 20% 25V
CA118	QCC11EM-104	C CAPACITOR	.10MF 20% 25V
CA119	QKXB1CM-222Y	C CAPACITOR	2200PF 20% 16V
CA120	QETC1HM-1052N	E CAPACITOR	1.0MF 20% 50V
CA121	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA122	QCS32HJ-1012V	C CAPACITOR	100PF 5% 500V
CA123	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V
CA124	QETC1HM-4742N	E CAPACITOR	.47MF 20% 50V
CA125	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
CA151	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA152	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
CA153	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA154	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA155	QETC1CM-4762N	E CAPACITOR	47MF 20% 16V

A REF.	PARTS NO.	PARTS NAME	REMARKS
CA156	QETC1CM-4762N	E CAPACITOR	47MF 20% 16V
CA157	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA158	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA160	QETC1AM-2272N	E CAPACITOR	220MF 20% 10V
CA161	QETC1EM-2272N	E CAPACITOR	220MF 20% 25V
CA201	QETC1HM-2252N	E CAPACITOR	2.2MF 20% 50V
CA202	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA203	QFV11HJ-1532N	TF CAPACITOR	.015MF 5% 50V
CA204	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA205	QETC1HM-1052N	E CAPACITOR	1.0MF 20% 50V
CA206	QETC1HM-4742N	E CAPACITOR	.47MF 20% 50V
CA207	QETC1HM-4742N	E CAPACITOR	.47MF 20% 50V
CA208	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
CA209	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA210	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA211	QETC1HM-2252N	E CAPACITOR	2.2MF 20% 50V
CA212	QETC1EM-4752N	E CAPACITOR	4.7MF 20% 25V
CA213	QFV11HJ-1532N	TF CAPACITOR	.015MF 5% 50V
CA214	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA215	QCC31EM-1532V	C CAPACITOR	.015MF 20% 25V
CA216	QETC1HM-1052N	E CAPACITOR	1.0MF 20% 50V
CA217	QETC1EM-4752N	E CAPACITOR	4.7MF 20% 25V
CA218	QCC11EM-104	C CAPACITOR	.10MF 20% 25V
CA219	QKXB1CM-222Y	C CAPACITOR	2200PF 20% 16V
CA220	QETC1HM-1052N	E CAPACITOR	1.0MF 20% 50V
CA221	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CA222	QCS32HJ-1012V	C CAPACITOR	100PF 5% 500V
CA223	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V
CA224	QETC1HM-4742N	E CAPACITOR	.47MF 20% 50V
CA225	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
CA251	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA252	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
CA253	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA254	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA255	QETC1CM-4762N	E CAPACITOR	47MF 20% 16V
CA256	QETC1CM-4762N	E CAPACITOR	47MF 20% 16V
CA257	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA258	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA260	QETC1AM-2272N	E CAPACITOR	220MF 20% 10V
CA261	QETC1EM-2272N	E CAPACITOR	220MF 20% 25V
CA301	QETC1AM-4762N	E CAPACITOR	47MF 20% 10V
CA303	QETC1HM-4752N	E CAPACITOR	4.7MF 20% 50V
CA304	QETC1CM-1062N	E CAPACITOR	10MF 20% 16V
CA305	QETC1HM-2252N	E CAPACITOR	2.2MF 20% 50V
CA306	QETC1AM-3362N	E CAPACITOR	33MF 20% 10V
CA307	QETC1CM-1062N	E CAPACITOR	10MF 20% 16V
CA308	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA310	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA311	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V
CA312	QETC1HM-4752N	E CAPACITOR	4.7MF 20% 50V

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	CA313	QETC1AM-476ZM	E CAPACITOR	47MF 20% 10V
	CA314	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA315	QFLA1HJ-152ZM	M CAPACITOR	1500PF 5% 50V
	CA316	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
	CA317	QFNA1HJ-332	M CAPACITOR	3300PF 5% 50V
	CA322	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
	CA323	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
	CA351	QFV71HJ-393ZM	FILM CAPACITOR	.039MF 5% 50V
	CA352	QFV71HJ-393ZM	FILM CAPACITOR	.039MF 5% 50V
	CA353	QCC11EM-103	C CAPACITOR	.010MF 20% 25V
	CNA01	VMC0064-007	CONNECTOR	
	CNA02	TXLL-005-M	CONNECTOR	
	CNA03	VMC0156-S10	CONNECTOR	
	CNA04	TXLL-006-M	CONNECTOR	
	CNA05	VMC0156-P07	CONNECTOR	
	CN351	VMC0156-S12	CONNECTOR	
	CN352	VMC0156-P12	CONNECTOR	
	CN353	TTL25V-008	CONNECTOR	
	CN501	TXLL-006-M	CONNECTOR	
	CN502	TXLP-008-B	CONNECTOR	
	CN503	VMC0156-P10	CONNECTOR	
	CN505	VMC0156-S07	CONNECTOR	
	CN951	VMC0156-P08	CONNECTOR	
	CN952	VMC0156-S08	CONNECTOR	
	CN953	VMC0156-S10	CONNECTOR	
	CN954	VMC0156-P10	CONNECTOR	
	D 501	MA700A	S.B.DIODE	
	D 502	MA165	SI DIODE	
	D 503	MA165	SI DIODE	
	D 951	1N5401F	SI DIODE	
A	D 952	S5VB10-4001L15	SI DIODE	
A	DA101	MA165	SI DIODE	
	DA102	MA165	SI DIODE	
	DA201	MA165	SI DIODE	
	DA202	MA165	SI DIODE	
	DA301	MA165	SI DIODE	
	DA302	MA165	SI DIODE	
	DA303	MA165	SI DIODE	
	DA351	MA700	ZENER DIODE	
	DA352	MA700	ZENER DIODE	
	DA353	MA165	SI DIODE	
	DA354	MA165	SI DIODE	
	ICA01	UPC1228HA	IC	
	ICA02	LA3220	IC	
	ICA03	UPC1330HA	IC	
	ICA04	HA12134A	IC	
	ICA05	LA4496	IC	
	ICA06	LA4496	IC	
	J 353	QMS301C-V01	JACK	
	L 501	VQH1008-024	DSC COIL (BIAS)	

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	L 502	VQP0028-221Z	INDUCTOR	
	LA101	VQP0001-183ZS	INDUCTOR	
	LA102	VQP0001-562ZS	INDUCTOR	
	LA201	VQP0001-183ZS	INDUCTOR	
	LA202	VQP0001-562ZS	INDUCTOR	
	Q 501	2SC3311(R,S)	TRANSISTOR	
	Q 502	2SB562(C)	TRANSISTOR	
	Q 503	2SD1302(S,T)	TRANSISTOR	
	Q 504	2SD1302(S,T)	TRANSISTOR	
	Q 505	2SD1302(S,T)	TRANSISTOR	
	Q 506	2SD1302(S,T)	TRANSISTOR	
	Q 507	2SA952(L,K)	TRANSISTOR	
	Q 508	DTA143ES	TRANSISTOR	
	Q 509	2SC3311(R,S)	TRANSISTOR	
	Q 510	2SC3311(R,S)	TRANSISTOR	
	QA101	DTC114TS	TRANSISTOR	
	QA102	2SC2001(L,K)	TRANSISTOR	
	QA103	2SC2001(L,K)	TRANSISTOR	
	QA104	DTC114TS	TRANSISTOR	
	QA151	2SD1302(S,T)	TRANSISTOR	
	QA152	2SD1302(S,T)	TRANSISTOR	
	QA201	DTC114TS	TRANSISTOR	
	QA202	2SC2001(L,K)	TRANSISTOR	
	QA203	2SC2001(L,K)	TRANSISTOR	
	QA204	DTC114TS	TRANSISTOR	
	QA251	2SD1302(S,T)	TRANSISTOR	
	QA252	2SD1302(S,T)	TRANSISTOR	
	QA301	2SC3311(R,S)	TRANSISTOR	
	QA302	DTC114TS	TRANSISTOR	
	QA303	2SA992(E,F)	TRANSISTOR	
	QA304	DTC144ES	TRANSISTOR	
	QA305	2SC1845(E,U)	TRANSISTOR	
	QA306	2SC1845(E,U)	TRANSISTOR	
	R 501	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	R 502	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W
	R 503	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	R 504	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	R 505	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	R 506	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	R 507	QRD161J-560	CARBON RESISTOR	56 5% 1/6W
	R 508	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	R 510	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
	R 511	QRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W
	R 512	QRD161J-2R7Y	C RESISTOR	2.7 5% 1/6W
	R 513	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W
	R 514	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W
	R 516	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	R 517	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	R 519	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
	R 521	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	RA216	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RA217	QRD161J-432Y	CARBON RESISTOR	4.3K 5% 1/6W
	RA218	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA221	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W
	RA223	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RA250	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA251	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA252	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RA253	QRD161J-391	CARBON RESISTOR	390 5% 1/6W
	RA254	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
	RA255	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA256	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA257	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA258	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA260	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W
	RA261	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA301	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RA302	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RA303	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
	RA304	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RA305	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA306	QRD161J-161Y	C RESISTOR	160 5% 1/6W
	RA307	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	RA308	QRD161J-181	CARBON RESISTOR	180 5% 1/6W
	RA309	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA310	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA312	QRD161J-242Y	CARBON RESISTOR	2.4K 5% 1/6W
	RA313	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RA314	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	RA315	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	RA316	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
	RA317	QRD161J-121	CARBON RESISTOR	120 5% 1/6W
	RA318	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RA319	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	RA320	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	RA321	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA322	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA323	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA324	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W
	RA351	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA352	QRD161J-560	CARBON RESISTOR	56 5% 1/6W
	S 501	VSH153-001	SWITCH	
	S 502	QST3101-V11	PUSH SWITCH	
	VRA11	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA12	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA13	QVPA603-503AZM	V RESISTOR	
	VRA21	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA22	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA23	QVPA603-503AZM	V RESISTOR	
	C 501	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	R 522	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	R 523	QRD161J-471	CARBON RESISTOR	470 5% 1/6W
	R 524	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	R 525	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	R 526	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	R 527	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RA101	QRD161J-470	CARBON RESISTOR	47 5% 1/6W
	RA102	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	RA103	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
	RA104	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA105	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA107	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA108	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W
	RA109	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA110	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA111	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RA112	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W
	RA113	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA114	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA115	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RA116	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RA117	QRD161J-432Y	CARBON RESISTOR	4.3K 5% 1/6W
	RA118	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA121	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W
	RA123	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RA150	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA151	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA152	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RA153	QRD161J-391	CARBON RESISTOR	390 5% 1/6W
	RA154	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
	RA155	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA156	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA157	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA158	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA160	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W
	RA161	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA201	QRD161J-470	CARBON RESISTOR	47 5% 1/6W
	RA202	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	RA203	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
	RA204	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA205	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA207	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA208	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W
	RA209	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA210	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA211	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RA212	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W
	RA213	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA214	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA215	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	CA157	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA158	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA160	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V
	CA161	QETC1EM-227ZN	E CAPACITOR	220MF 20% 25V
	CA201	QETC1AM-225ZN	E CAPACITOR	2.2MF 20% 50V
	CA202	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA203	QFV11HJ-153ZN	TF CAPACITOR	.015MF 5% 50V
	CA204	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA205	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V
	CA206	QETC1HM-474ZN	E CAPACITOR	.47MF 20% 50V
	CA207	QETC1HM-474ZN	E CAPACITOR	.47MF 20% 50V
	CA208	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
	CA209	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA210	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA211	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V
	CA212	QETC1EM-475ZN	E CAPACITOR	4.7MF 20% 25V
	CA213	QFV11HJ-153ZN	TF CAPACITOR	.015MF 5% 50V
	CA214	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA215	QCC31EM-153ZV	C CAPACITOR	.015MF 20% 25V
	CA216	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V
	CA217	QETC1EM-475ZN	E CAPACITOR	4.7MF 20% 25V
	CA218	QCC11EM-104	C CAPACITOR	.10MF 20% 25V
	CA219	QCB1CM-222Y	C CAPACITOR	2200PF 20% 16V
	CA220	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V
	CA221	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA222	QCS32HJ-101ZV	C CAPACITOR	100PF 5% 500V
	CA223	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V
	CA224	QETC1HM-474ZN	E CAPACITOR	.47MF 20% 50V
	CA225	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
	CA251	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA252	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
	CA253	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA254	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA255	QETC1CM-476ZN	E CAPACITOR	47MF 20% 16V
	CA256	QETC1CM-476ZN	E CAPACITOR	47MF 20% 16V
	CA257	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA258	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA260	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V
	CA261	QETC1EM-227ZN	E CAPACITOR	220MF 20% 25V
	CA301	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	CA303	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V
	CA304	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V
	CA305	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V
	CA306	QETC1AM-336ZN	E CAPACITOR	33MF 20% 10V
	CA307	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V
	CA308	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA310	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA311	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA312	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V
	CA313	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	C 502	QETC1EM-476ZN	E CAPACITOR	47MF 20% 25V
	C 503	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V
	C 504	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V
	C 505	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V
	C 506	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	C 508	QFLA1HJ-682ZM	M CAPACITOR	6800PF 5% 50V
	C 509	QFLA1HJ-682ZM	M CAPACITOR	6800PF 5% 50V
	C 510	QFLA1HJ-332ZM	M CAPACITOR	3300PF 5% 50V
	C 511	QFLA1HJ-332ZM	M CAPACITOR	3300PF 5% 50V
	C 512	QFV41HJ-123	FILM CAPACITOR	.012MF 5% 50V
	C 513	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V
	C 520	QEK61CM-107ZN	E CAPACITOR	100MF 20% 16V
	C 521	QCB1CM-682Y	C CAPACITOR	6800PF 20% 16V
	C 522	QCB1CM-682Y	C CAPACITOR	6800PF 20% 16V
	C 951	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
	C 952	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
	C 953	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
	C 954	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
	C 955	QETB1EM-688N	E CAPACITOR	6800MF 20% 25V
	CA101	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V
	CA102	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA103	QFV11HJ-153ZN	TF CAPACITOR	.015MF 5% 50V
	CA104	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA105	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V
	CA106	QETC1HM-474ZN	E CAPACITOR	4.7MF 20% 50V
	CA107	QETC1HM-474ZN	E CAPACITOR	4.7MF 20% 50V
	CA108	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
	CA109	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA110	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA111	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V
	CA112	QETC1EM-475ZN	E CAPACITOR	4.7MF 20% 25V
	CA113	QFV11HJ-153ZN	TF CAPACITOR	.015MF 5% 50V
	CA114	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA115	QCC31EM-153ZV	C CAPACITOR	.015MF 20% 25V
	CA116	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V
	CA117	QETC1EM-475ZN	E CAPACITOR	4.7MF 20% 25V
	CA118	QCC11EM-104	C CAPACITOR	.10MF 20% 25V
	CA119	QCB1CM-222Y	C CAPACITOR	2200PF 20% 16V
	CA120	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V
	CA121	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
	CA122	QCS32HJ-101ZV	C CAPACITOR	100PF 5% 500V
	CA123	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V
	CA124	QETC1HM-474ZN	E CAPACITOR	.47MF 20% 50V
	CA125	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
	CA151	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	CA152	QCB1HK-471Y	C CAPACITOR	470PF 10% 50V
	CA153	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA154	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	CA155	QETC1CM-476ZN	E CAPACITOR	47MF 20% 16V
	CA156	QETC1CM-476ZN	E CAPACITOR	47MF 20% 16V

REF.	PARTS NO.	PARTS NAME	REMARKS
LA101	VQP0001-183ZS	INDUCTOR	
LA102	VQP0001-562ZS	INDUCTOR	
LA201	VQP0001-183ZS	INDUCTOR	
LA202	VQP0001-562ZS	INDUCTOR	
Q 501	2SC3311(R,S)	TRANSISTOR	
Q 502	2SB562(C)	TRANSISTOR	
Q 503	2SD1302(S,T)	TRANSISTOR	
Q 504	2SD1302(S,T)	TRANSISTOR	
Q 505	2SD1302(S,T)	TRANSISTOR	
Q 506	2SD1302(S,T)	TRANSISTOR	
Q 507	2SA952(L,K)	TRANSISTOR	
Q 508	DTA143ES	TRANSISTOR	
Q 509	2SC3311(R,S)	TRANSISTOR	
Q 510	2SC3311(R,S)	TRANSISTOR	
QA101	DTC114TS	TRANSISTOR	
QA102	2SC2001(L,K)	TRANSISTOR	
QA103	2SC2001(L,K)	TRANSISTOR	
QA104	DTC114TS	TRANSISTOR	
QA151	2SD1302(S,T)	TRANSISTOR	
QA152	2SD1302(S,T)	TRANSISTOR	
QA201	DTC114TS	TRANSISTOR	
QA202	2SC2001(L,K)	TRANSISTOR	
QA203	2SC2001(L,K)	TRANSISTOR	
QA204	DTC114TS	TRANSISTOR	
QA251	2SD1302(S,T)	TRANSISTOR	
QA252	2SD1302(S,T)	TRANSISTOR	
QA301	2SC3311(R,S)	TRANSISTOR	
QA302	DTC114TS	TRANSISTOR	
QA303	2SA992(E,F)	TRANSISTOR	
QA304	DTC144ES	TRANSISTOR	
QA305	2SC1845(E,U)	TRANSISTOR	
QA306	2SC1845(E,U)	TRANSISTOR	
R 501	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
R 502	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W
R 503	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
R 504	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 505	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 506	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
R 507	QRD161J-560	CARBON RESISTOR	56 5% 1/6W
R 508	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
R 510	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
R 511	QRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W
R 512	QRD161J-2R7Y	C RESISTOR	2.7 5% 1/6W
R 513	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W
R 514	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W
R 516	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
R 517	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
R 519	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
R 521	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
R 522	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W

REF.	PARTS NO.	PARTS NAME	REMARKS
CA314	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CA315	QFLA1HJ-152ZM	M CAPACITOR	1500PF 5% 50V
CA316	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CA317	QFN41HJ-332	M CAPACITOR	3300PF 5% 50V
CA322	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CA323	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CA351	QFV71HJ-393ZM	FILM CAPACITOR	.039MF 5% 50V
CA352	QFV71HJ-393ZM	FILM CAPACITOR	.039MF 5% 50V
CA353	QCC11EM-103	C CAPACITOR	.010MF 20% 25V
CNA01	VMC0064-007	CONNECTOR	
CNA02	TXLL-005-M	CONNECTOR	
CNA03	VMC0156-S10	CONNECTOR	
CNA04	TXLL-006-M	CONNECTOR	
CNA05	VMC0156-P07	CONNECTOR	
CN351	VMC0156-S12	CONNECTOR	
CN352	VMC0156-P12	CONNECTOR	
CN353	TTL25V-008	CONNECTOR	
CN501	TXLL-006-M	CONNECTOR	
CN502	TXLP-008-B	CONNECTOR	
CN503	VMC0156-P10	CONNECTOR	
CN505	VMC0156-S07	CONNECTOR	
CN951	VMC0156-P08	CONNECTOR	
CN952	VMC0156-S08	CONNECTOR	
CN953	VMC0156-S10	CONNECTOR	
CN954	VMC0156-P10	CONNECTOR	
D 501	MA700A	S.B. DIODE	
D 502	MA165	SI DIODE	
D 503	MA165	SI DIODE	
D 951	1N5401F	SI DIODE	
D 952	S5VB10-400L15	SI DIODE	
DA101	MA165	SI DIODE	
DA102	MA165	SI DIODE	
DA201	MA165	SI DIODE	
DA202	MA165	SI DIODE	
DA301	MA165	SI DIODE	
DA302	MA165	SI DIODE	
DA303	MA165	SI DIODE	
DA351	MA700	ZENER DIODE	
DA352	MA700	ZENER DIODE	
DA353	MA165	SI DIODE	
DA354	MA165	SI DIODE	
ICA01	UPC1228HA	IC	
ICA02	LA3220	IC	
ICA03	UPC1330HA	IC	
ICA04	HA12134A	IC	
ICA05	LA4496	IC	
ICA06	LA4496	IC	
J 353	QMS301C-V01	JACK	
L 501	VQH1008-024	OSC COIL(BIAS)	
L 502	VQP0028-221Z	INDUCTOR	

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	RA217	QRD161J-432Y	CARBON RESISTOR	4.3K 5% 1/6W
	RA218	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA221	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W
	RA223	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RA250	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA251	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA252	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RA253	QRD161J-391	CARBON RESISTOR	390 5% 1/6W
	RA254	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
	RA255	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA256	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA257	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA258	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA260	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W
	RA261	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA301	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RA302	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RA303	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
	RA304	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RA305	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA306	QRD161J-161Y	C RESISTOR	160 5% 1/6W
	RA307	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	RA308	QRD161J-181	CARBON RESISTOR	180 5% 1/6W
	RA309	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA310	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA312	QRD161J-242Y	CARBON RESISTOR	2.4K 5% 1/6W
	RA313	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RA314	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	RA315	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	RA316	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
	RA317	QRD161J-121	CARBON RESISTOR	120 5% 1/6W
	RA318	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RA319	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	RA320	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	RA321	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA322	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA323	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA324	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W
	RA351	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA352	QRD161J-560	CARBON RESISTOR	56 5% 1/6W
	S 501	VSH1153-001	SWITCH	
	S 502	QST3101-V11	PUSH SWITCH	
	VRA11	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA12	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA13	QVPA603-503AZM	V RESISTOR	
	VRA21	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA22	QVPA603-502AZM	SEMI-V.RESISTOR	
	VRA23	QVPA603-503AZM	V RESISTOR	

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	R 523	QRD161J-471	CARBON RESISTOR	470 5% 1/6W
	R 524	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	R 525	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	R 526	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	R 527	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RA101	QRD161J-470	CARBON RESISTOR	47 5% 1/6W
	RA102	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	RA103	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
	RA104	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA105	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA107	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA108	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W
	RA109	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA110	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA111	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RA112	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W
	RA113	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA114	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA115	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RA116	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RA117	QRD161J-432Y	CARBON RESISTOR	4.3K 5% 1/6W
	RA118	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA121	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W
	RA123	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RA150	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA151	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RA152	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RA153	QRD161J-391	CARBON RESISTOR	390 5% 1/6W
	RA154	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
	RA155	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA156	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W
	RA157	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA158	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RA160	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W
	RA161	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA201	QRD161J-470	CARBON RESISTOR	47 5% 1/6W
	RA202	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	RA203	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
	RA204	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA205	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA207	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RA208	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W
	RA209	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA210	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RA211	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RA212	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W
	RA213	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RA214	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RA215	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RA216	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W

CD Control P.C. Board Parts List

BLOCK NO. M2MM

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	#P	VM2307-007	PW BOARD	
	C 502	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	C 505	QCB81HK-471Y	C CAPACITOR	470PF 10% 50V
	C 506	QCC11EM-223	C CAPACITOR	.022MF 20% 25V
	C 507	QCS11HJ-680	C CAPACITOR	68PF 5% 50V
	C 508	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	C 509	QCS11HJ-680	C CAPACITOR	68PF 5% 50V
	C 510	QCSB1HK-2R2Y	C CAPACITOR	2.2PF 10% 50V
	C 511	QCC11EM-223	C CAPACITOR	.022MF 20% 25V
	C 512	QCS11HJ-220	C CAPACITOR	22PF 5% 50V
	C 513	QCB81HK-820Y	C CAPACITOR	82PF 10% 50V
	C 514	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
	C 515	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
	C 516	QCS11HJ-470	C CAPACITOR	47PF 5% 50V
	C 517	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V
	C 518	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V
	C 519	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
	C 520	QCVB1CM-232Y	G CAPACITOR	2200PF 20% 16V
	C 521	QEK41CM-476	E CAPACITOR	47MF 20% 16V
	C 522	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V
	C 523	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V
	C 525	QER41EM-475	E CAPACITOR	4.7MF 20% 25V
	C 526	QER61AM-476ZM	E CAPACITOR	47MF 20% 10V
	C 527	QEPJ1HM-105ZM	NP CAPACITOR	1.0MF 20% 50V
	C 528	QFV41HJ-123	TF CAPACITOR	.012MF 5% 50V
	C 529	QFV11HJ-273ZN	TF CAPACITOR	.027MF 5% 50V
	C 531	QCVB1CM-822Y	C CAPACITOR	8200PF 20% 16V
	C 535	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
	C 544	QCS11HJ-100	C CAPACITOR	10PF 5% 50V
	C 545	QCS11HJ-100	C CAPACITOR	10PF 5% 50V
	C 547	QFV41HJ-473	TF CAPACITOR	.047MF 5% 50V
	C 548	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	C 549	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
	C 550	QCB81HK-331Y	C CAPACITOR	330PF 10% 50V
	C 551	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	C 552	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	C 553	QCY41HK-122	C CAPACITOR	1200PF 10% 50V
	C 554	QETC1EM-106ZN	E CAPACITOR	10MF 20% 25V
	C 555	QCY41HK-122	C CAPACITOR	1200PF 10% 50V
	C 556	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	C 557	QCB81HK-331Y	C CAPACITOR	330PF 10% 50V
	C 563	QFV41HJ-123	FILM CAPACITOR	.012MF 5% 50V
	C 587	QCS11HJ-470	C CAPACITOR	47PF 5% 50V
	C 591	QCC11EM-223	C CAPACITOR	.022MF 20% 25V
	C 604	QETC1EM-226ZN	E CAPACITOR	22MF 20% 25V
	C 605	QETC1EM-226ZN	E CAPACITOR	22MF 20% 25V
	C 606	QCVB1CM-562Y	C CAPACITOR	5600PF 20% 16V
	C 607	QCVB1CM-562Y	C CAPACITOR	5600PF 20% 16V
	C 608	QCVB1CM-682Y	C CAPACITOR	6800PF 20% 16V
	C 609	QCVB1CM-682Y	C CAPACITOR	6800PF 20% 16V

BLOCK NO. M2MM

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	C 610	QCS11HJ-680	C CAPACITOR	68PF 5% 50V
	C 611	QCS11HJ-680	C CAPACITOR	68PF 5% 50V
	C 612	QETC1EM-226ZN	E CAPACITOR	22MF 20% 25V
	C 613	QETC1EM-226ZN	E CAPACITOR	22MF 20% 25V
	C 614	QCC11EM-123	C CAPACITOR	.012MF 20% 25V
	C 615	QCC11EM-123	C CAPACITOR	.012MF 20% 25V
	C 616	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	C 617	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
	C 618	QCC11EM-223	C CAPACITOR	.022MF 20% 25V
	C 620	QEK61AM-107ZM	E CAPACITOR	100MF 20% 10V
	C 621	QETC1AM-477ZN	E CAPACITOR	470MF 20% 10V
	C 623	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V
	CN504	VMC0162-010	**CONNECTOR	
	D 610	RD5.6ES	DIODE	
	IC501	MC13501M	IC	
	IC502	NJM3403D-C	IC	
	IC503	BA6294	IC	
	IC504	BA6294	IC	
	IC602	TC9201BF	IC	
	IC603	TC9200BF	IC	
	IC604	CKX5816PS-15L	IC	
	IC605	TD6710AF	IC	
	IC607	XRA15218N	IC	
	Q 501	2SA1309(R,S)	TRANSISTOR	
	Q 503	2SC3311A(QR)	TR-I-M	
	Q 504	2SC3311A(QR)	TR-I-M	
	Q 505	2SA1309(R,S)	TRANSISTOR	
	Q 614	2SD1302(S,T)	TRANSISTOR	
	R 501	GRD161J-184	CARBON RESISTOR	180K 5% 1/6W
	R 502	GRD161J-154	CARBON RESISTOR	150K 5% 1/6W
	R 503	GRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	R 504	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	R 505	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	R 506	GRD161J-681	CARBON RESISTOR	680 5% 1/6W
	R 507	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	R 508	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W
	R 509	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
	R 510	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	R 511	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	R 512	GRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	R 513	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	R 514	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	R 515	GRD161J-333	CARBON RESISTOR	33K 5% 1/6W
	R 516	GRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	R 517	GRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W
	R 519	GRD161J-823	CARBON RESISTOR	82K 5% 1/6W
	R 520	QRV141F-3302AY	CMF RESISTOR	33.1K 1/4W
	R 521	GRD161J-823	CARBON RESISTOR	82K 5% 1/6W
	R 522	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	R 523	GRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W

BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS
R 673	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W
R 674	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
R 675	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
R 676	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W
R 677	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W
R 678	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W
R 681	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W
R 682	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W
R 684	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W
R 685	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
R 686	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W
R 687	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 688	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 690	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W
R 691	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W
R 692	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W
R 695	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W
R 696	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
R 697	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W
R 698	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
R 699	PTH61G30B02R2N	POSISTER	
VR501	QVZ3523-503AZ	V RESISTOR	
X 601	VXX5016-934V	CRYSTAL	

REF.	PARTS NO.	PARTS NAME	REMARKS
R 524	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W
R 525	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W
R 526	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
R 527	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W
R 528	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
R 529	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 530	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 531	QRD161J-821	CARBON RESISTOR	820 5% 1/6W
R 532	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
R 533	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 534	QRD161J-272	CARBON RESISTOR	27K 5% 1/6W
R 535	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
R 536	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W
R 537	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
R 538	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W
R 539	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
R 540	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
R 541	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
R 542	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
R 544	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
R 545	QRD161J-821	CARBON RESISTOR	10K 5% 1/6W
R 546	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
R 547	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
R 548	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
R 549	QRD161J-181	CARBON RESISTOR	180 5% 1/6W
R 550	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 559	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 560	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 565	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
R 566	QRD161J-181	CARBON RESISTOR	180 5% 1/6W
R 570	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 573	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
R 640	QRD161J-821	CARBON RESISTOR	820 5% 1/6W
R 641	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
R 642	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
R 643	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
R 645	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
R 647	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
R 649	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
R 660	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
R 661	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
R 662	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W
R 663	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W
R 664	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 665	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 666	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 667	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
R 668	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W
R 669	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W
R 672	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W

■ Tuner P.C. Board Parts List

BLOCK NO. **M3MM**

REF.	PARTS NO.	PARTS NAME	REMARKS
BP 01	VBP4M3B-005	BP FILTER	
C 001	QCS11HJ-200	C CAPACITOR	20PF 5% 50V
C 002	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
C 003	QCS1HJ-130Y	C CAPACITOR	13PF 5% 50V
C 004	QCT05UJ-100	C CAPACITOR	10PF 5% 50V
C 005	QCT05UJ-180	C CAPACITOR	18PF 5% 50V
C 006	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 007	QCT30CH-200Y	C CAPACITOR	20PF 5% 50V
C 008	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 009	QCT05UJ-100	C CAPACITOR	10PF 5% 50V
C 010	QCT30CH-2R2Y	C CAPACITOR	2.2PF 5% 50V
C 011	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 012	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V
C 013	QCC11EM-223	C CAPACITOR	.022MF 20% 25V
C 014	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
C 016	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 017	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
C 018	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 019	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V
C 020	QEK61AM-107ZM	E CAPACITOR	100MF 20% 10V
C 021	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
C 022	QFP31HG-431ZM	PP CAPACITOR	430PF 2% 50V
C 023	QCT30UJ-120Y	C CAPACITOR	12PF 5% 50V
C 024	QCS11HJ-560	C CAPACITOR	56PF 5% 50V
C 025	QEK41HM-104	E CAPACITOR	.10MF 20% 50V
C 026	QCS11HJ-181	C CAPACITOR	180PF 5% 50V
C 027	QCS11HJ-101	C CAPACITOR	100PF 5% 50V
C 028	QCS11HJ-180	C CAPACITOR	18PF 5% 50V
C 029	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V
C 030	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 031	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 032	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 033	QEK61AM-107ZM	E CAPACITOR	100MF 20% 10V
C 034	QCC31EM-333ZV	C CAPACITOR	.033MF 20% 25V
C 035	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
C 036	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V
C 037	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 038	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
C 039	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
C 040	QEK41HM-335	E CAPACITOR	3.3MF 20% 50V
C 041	QEK41CM-106	E CAPACITOR	10MF 20% 16V
C 042	QCVB1CN-152Y	C CAPACITOR	1500PF 20% 16V
C 043	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V
C 044	QEK41HM-104	E CAPACITOR	.10MF 20% 50V
C 045	QEK41HM-474	E CAPACITOR	.47MF 20% 50V
C 046	QEK41CM-106	E CAPACITOR	10MF 20% 16V
C 047	QCC11EK-153ZV	C CAPACITOR	.015MF 10% 25V
C 048	QCC11EK-153ZV	C CAPACITOR	.015MF 10% 25V
C 049	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
C 050	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V

REF.	PARTS NO.	PARTS NAME	REMARKS
C 053	QCS11HJ-150	C CAPACITOR	15PF 5% 50V
C 059	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
C 060	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
C 061	QEK61AM-107ZM	E CAPACITOR	100MF 20% 10V
C 062	QCS1HJ-130Y	C CAPACITOR	13PF 5% 50V
C 063	QCC11EM-473	C CAPACITOR	.047MF 20% 25V
C 064	QCS11HJ-270	C CAPACITOR	27PF 5% 50V
C 065	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V
C 066	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V
C 067	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V
C 069	QCVB1CM-222Y	C CAPACITOR	2200PF 20% 16V
C 070	QEK41HM-225	E CAPACITOR	2.2MF 20% 50V
C 071	QEK41HM-335	E CAPACITOR	3.3MF 20% 50V
CF 01	VCF2L3B-105Z	C FILTER	
CF 02	VCF2L3B-105Z	C FILTER	
CF 03	VCF1Z2Z-105Z	C FILTER	
CF 04	CSB456F18	CERA LOCK	
CN 01	TXLP-010-B	CONNECTOR	
D 001	KV1350NT	VARI CAP	
D 002	KV1350NT	VARI CAP	
D 003	KV1350NT	VARI CAP	
D 004	KV1350NT	VARI CAP	
D 005	MA165	SI DIODE	
D 006	MA165	SI DIODE	
D 007	MA165	SI DIODE	
D 008	KV1550NT	VARI-CAPACITOR	
D 009	KV1550NT	VARI-CAPACITOR	
D 010	KV1550NT	VARI-CAPACITOR	
D 011	KV1550NT	VARI-CAPACITOR	
D 012	MA165	SI DIODE	
D 013	MA165	SI DIODE	
D 014	MA165	SI DIODE	
IC 01	TA7358P(N)	IC	
IC 02	TA8132AN	IC	
IC 03	TC9216P	IC	
J 001	YKD31-0442	ANT TERMINAL	
J 002	EMB40YV-201K	ANT TERMINAL	
L 001	VQF1B20-017	OSC COIL	
L 002	VQF1B12-004	RF COIL	
L 003	VQZ0030-010	RF COIL(MW)	
L 004	VQM7U02-404	OSC COIL(MW)	
L 005	VQZ0030-008	RF COIL	
L 006	VQL7U02-502	OSC COIL(LW)	
L 007	VQP025K-4R7Y	INDUCTOR	
L 008	VQP025K-221Y	INDUCTOR	
L 009	VQP025K-4R7Y	INDUCTOR	
L 010	VQP025K-4R7Y	INDUCTOR	
L 011	VQP025K-4R7Y	INDUCTOR	
L 012	V03047-16	RF COIL	
Q 001	2SC1923(O)E2	TRANSISTOR	

■ Function/Display P.C. Board Parts List BLOCK NO. M4MM

REF.	PARTS NO.	PARTS NAME	REMARKS
CF 01	QEK41EM-335	E CAPACITOR	3.3MF 20% 25V
CF 02	QEK41CM-476	E CAPACITOR	47MF 20% 16V
CF 03	QEK41CM-336	E CAPACITOR	33MF 20% 16V
CF 04	QEK41CM-476	E CAPACITOR	47MF 20% 16V
CF 05	QEK41CM-336	E CAPACITOR	33MF 20% 16V
CF 06	QEK41CM-476	E CAPACITOR	47MF 20% 16V
CF 08	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF 09	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
CF 10	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
CF 11	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CF 12	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CF 13	QEK41CM-476	E CAPACITOR	47MF 20% 16V
CF 15	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CF 16	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CF 17	QEK41AM-107ZM	E CAPACITOR	100MF 20% 10V
CF 18	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V
CF 19	QEK41CM-476	E CAPACITOR	47MF 20% 16V
CF 20	QEK41CM-476	E CAPACITOR	47MF 20% 16V
CF 22	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CF 23	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CF 24	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CF101	QEK41HM-225	E CAPACITOR	10MF 20% 50V
CF102	QEK41CM-106	E CAPACITOR	1.0MF 20% 50V
CF103	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF104	QCB1CM-562Y	C CAPACITOR	5600PF 20% 16V
CF105	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
CF106	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CF107	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
CF108	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF109	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V
CF111	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF112	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
CF113	QEK41CM-226	E CAPACITOR	22MF 20% 16V
CF114	QFV11HJ-393ZM	TF CAPACITOR	.039MF 5% 50V
CF116	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V
CF117	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
CF201	QEK41HM-225	E CAPACITOR	2.2MF 20% 50V
CF202	QEK41CM-106	E CAPACITOR	10MF 20% 16V
CF203	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF204	QCB1CM-562Y	C CAPACITOR	5600PF 20% 16V
CF205	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
CF206	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V
CF207	QFV41HJ-683	TF CAPACITOR	.068MF 5% 50V
CF208	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF209	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V
CF211	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V
CF212	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
CF213	QEK41CM-226	E CAPACITOR	22MF 20% 16V
CF214	QFV11HJ-393ZM	TF CAPACITOR	.039MF 5% 50V
CF216	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V

REF.	PARTS NO.	PARTS NAME	REMARKS
CF217	QCS11HJ-330	C CAPACITOR	33PF 5% 50V
CM 01	VCE0056-479Z	SUPER CAP.	1000PF 10% 50V
CM 02	QCB1HK-102Y	C CAPACITOR	100MF 20% 10V
CM 03	QETC1AM-107ZN	E CAPACITOR	1000PF 10% 50V
CM 04	QCB1HK-102Y	C CAPACITOR	15PF 5% 50V
CM 05	QCT30CH-150Y	C CAPACITOR	15PF 5% 50V
CM 06	QCT30CH-150Y	C CAPACITOR	56PF 5% 50V
CM 07	QCS11HJ-560	C CAPACITOR	68PF 5% 50V
CM 08	QCS11HJ-680	C CAPACITOR	18PF 5% 50V
CM 09	QCS11HJ-180	C CAPACITOR	18PF 5% 50V
CM 10	QCS11HJ-180	C CAPACITOR	.47MF 20% 50V
CM 11	QETC1HM-474ZN	E CAPACITOR	.010MF 20% 16V
CM 12	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CM 14	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CM 15	QCB1CM-103Y	C CAPACITOR	100MF 20% 10V
CM 17	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
CM 24	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V
CM 26	QEK60JM-107ZM	E CAPACITOR	100MF 20% 6.3V
CM 27	QETC1CM-226ZN	E CAPACITOR	22MF 20% 16V
CM 28	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V
CM 29	QCT30CH-160Y	C CAPACITOR	16PF 5% 50V
CM 30	QCB1CM-103Y	C CAPACITOR	.010MF 20% 16V
CNC01	TXLP-002-B	CONNECTOR	
CNF01	VMC0162-R13	CONNECTOR	
CNF02	VMC0162-R13	CONNECTOR	
CNM01	TXLP-007-B	CONNECTOR	
CNM02	VMC0162-R13	CONNECTOR	
CNM03	VMC0162-R13	CONNECTOR	
CNM04	TXLP-006-B	CONNECTOR	
CNM05	VMC0107-005	CONNECTOR	
CNM06	VMC0162-010	**CONNECTOR	
CNM07	TTL25V-002	CONNECTOR	
DF 01	MA165	SI DIODE	
DF 03	MA165	SI DIODE	
DF 04	MA4056(M)	ZENER DIODE	
DF 05	MA165	SI DIODE	
DF 06	MA165	SI DIODE	
DF 07	MA165	SI DIODE	
DF 08	MA4082(M)	Z DIODE	
DF 09	MA4062(H)	Z DIODE	
DF 10	MA165	SI DIODE	
DM 02	MA165	SI DIODE	
DM 04	11E1	SI DIODE	
DM 05	MA165	SI DIODE	
ICF01	VC4580L	IC	
ICF02	XRA15218N	IC	
ICF03	VC4580L	IC	
ICF04	VC4580L	IC	
ICM01	HD404629A17FS	IC	
ICM02	MN1381-F	IC	

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	ICM04	VC80020-002	C NETWORK	
	ICM05	BAG208A	IC	
	ICM06	BAG208A	IC	
	LF 01	VQ025K-4R7Y	INDUCTOR	
	LM 01	VQ025K-221Y	INDUCTOR	
	LM 02	VQ025K-221Y	INDUCTOR	
	LM 05	VQ025K-221Y	INDUCTOR	
	LM 06	VQ025K-221Y	INDUCTOR	
	LM 07	VQ0048-009	INDUCTOR	
	LM 12	VQ0028-100Z	INDUCTOR	
	PLM01	VG20001-049	P-LAMP	
	QF 01	UN4111TA	TRANSISTOR	
	QF 02	2SB562(C)	TRANSISTOR	
	QF 03	2SB562(C)	TRANSISTOR	
	QF 04	2SC2785(E,F)	TRANSISTOR	
	QF 05	2SC2785(E,F)	TRANSISTOR	
	QF 06	UN411E	TRANSISTOR	
	QF 07	2SB941(P)	TRANSISTOR	
	QF 08	2SC2785(E,F)	TRANSISTOR	
	QF 09	2SC2785(E,F)	TRANSISTOR	
	QF 10	2SC2785(E,F)	TRANSISTOR	
	QF 11	2SC3311A(RS)	TR	
	QF 12	UN4213	TRANSISTOR	
	QF101	2SD1302(S,T)	TRANSISTOR	
	QF103	2SD1302(S,T)	TRANSISTOR	
	QF104	2SD1302(S,T)	TRANSISTOR	
	QF105	2SC2785(E,F)	TRANSISTOR	
	QF107	2SK301(P,Q)	FET	
	QF109	2SD1302(S,T)	TRANSISTOR	
	QF201	2SD1302(S,T)	TRANSISTOR	
	QF203	2SD1302(S,T)	TRANSISTOR	
	QF204	2SD1302(S,T)	TRANSISTOR	
	QF205	2SC2785(E,F)	TRANSISTOR	
	QF207	2SK301(P,Q)	FET	
	QF209	2SD1302(S,T)	TRANSISTOR	
	QM 01	2SC2839(E)AC	TRANSISTOR	
	QM 02	2SC2839(E)AC	TRANSISTOR	
	QM 03	DTA114YSTP	TRANSISTOR	
	QM 04	2SC945L(P,Q)	TRANSISTOR	
	QM 05	UN4211	TRANSISTOR	
	QM 06	2SB562(B,C)	TRANSISTOR	
	QM 07	2SC945L(P,Q)	TRANSISTOR	
	QM 08	2SC945L(P,Q)	TRANSISTOR	
	QM 09	2SA1175(HFE)	TRANSISTOR	
	QM 10	2SC945L(P,Q)	TRANSISTOR	
	QM 11	DTC114TSP	TRANSISTOR	
	QM 12	2SA992(E,F)	TRANSISTOR	
	RF 07	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RF 08	QRD161J-121	CARBON RESISTOR	120 5% 1/6W
	RF 09	QRD161J-121	CARBON RESISTOR	120 5% 1/6W

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	RF 10	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RF 11	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RF 12	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RF 13	QRD161J-100	CARBON RESISTOR	10 5% 1/6W
	RF 14	QRD161J-100	CARBON RESISTOR	10 5% 1/6W
	RF 15	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	RF 16	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
	RF 17	QRD161J-471	CARBON RESISTOR	470 5% 1/6W
	RF 18	QRD161J-331	CARBON RESISTOR	330 5% 1/6W
	RF 19	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W
	RF 20	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W
	RF 21	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RF 22	QRD161J-151	CARBON RESISTOR	150 5% 1/6W
	RF 23	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
	RF 24	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W
	RF 25	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
	RF 26	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
	RF 27	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W
	RF 28	QRD161J-331	CARBON RESISTOR	330 5% 1/6W
	RF 29	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RF 30	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
	RF 31	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
	RF 32	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RF 33	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RF 34	QRD12CJ-470SX	C RESISTOR	47 5% 1/2W
	RF 35	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RF 36	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
	RF 39	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
	RF 40	QRD161J-101	CARBON RESISTOR	100 5% 1/6W
	RF 41	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RF 43	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RF 44	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W
	RF 53	QRD161J-100	CARBON RESISTOR	10 5% 1/6W
	RF 54	QRD161J-100	CARBON RESISTOR	10 5% 1/6W
	RF101	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
	RF103	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W
	RF104	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RF106	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RF107	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RF108	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RF109	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RF110	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W
	RF111	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
	RF112	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
	RF113	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RF114	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W
	RF115	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RF116	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
	RF117	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W
	RF118	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W

Δ REF.	PARTS NO.	PARTS NAME	REMARKS
RM 09	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 10	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 11	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 13	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 15	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 16	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 19	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W
RM 20	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 21	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W
RM 24	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 25	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 26	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 27	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 28	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 29	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 30	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 31	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 32	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 33	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 34	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 35	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 36	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 37	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 38	QRD161J-103	CARBON RESISTOR	2.2K 5% 1/6W
RM 40	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 41	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 42	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 43	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 45	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
RM 46	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 47	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 49	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
RM 50	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
RM 52	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
RM 53	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 54	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 55	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 56	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
RM 57	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 58	QRD161J-103	CARBON RESISTOR	1.0K 5% 1/6W
RM 59	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 60	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
RM 63	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RM 64	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 65	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RM 66	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
RM 67	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W
RM 68	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
RM 69	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 70	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W

Δ REF.	PARTS NO.	PARTS NAME	REMARKS
RF119	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
RF120	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RF121	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
RF122	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RF124	QRD161J-133	CARBON RESISTOR	15K 5% 1/6W
RF128	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RF129	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
RF130	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W
RF131	QRD161J-470	CARBON RESISTOR	47 5% 1/6W
RF132	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W
RF133	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
RF135	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
RF136	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RF137	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
RF201	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
RF203	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W
RF204	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
RF206	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
RF207	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
RF208	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RF210	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
RF211	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W
RF212	QRD161J-221	CARBON RESISTOR	220 5% 1/6W
RF213	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W
RF214	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W
RF215	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
RF216	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
RF217	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W
RF218	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
RF219	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W
RF220	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W
RF221	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W
RF222	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RF224	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
RF228	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RF229	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
RF230	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W
RF231	QRD161J-470	CARBON RESISTOR	47 5% 1/6W
RF232	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W
RF233	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
RF235	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W
RF236	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
RF237	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W
RM 01	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 03	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
RM 04	QRD161J-681	CARBON RESISTOR	680 5% 1/6W
RM 05	QRD161J-331	CARBON RESISTOR	330 5% 1/6W
RM 07	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
RM 08	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W

■ Operation Switch P.C. Board Parts List BLOCK NO. **M5MM**

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	CNT01	TXLP-008-B	CONNECTOR	
	CNV01	TXLP-005-B	CONNECTOR	
	CS 01	QC8B1HK-151Y	C CAPACITOR	150PF 10% 50V
	DS 01	LT3P8A	L.E.D	
	DS 02	LT3P8A	L.E.D	
	DS 03	MA165	SI DIODE	
	ICS01	SBX1610-02	RM RECEIVER	
	RS 01	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W
	RS 02	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
	RS 03	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RS 04	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RS 05	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RS 06	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W
	RS 07	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W
	RS 08	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W
	RS 09	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W
	RS 10	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W
	RS 11	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W
	RS 12	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W
	RS 13	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W
	RS 15	QRD161J-561	CARBON RESISTOR	560 5% 1/6W
	RS 16	QRD161J-561	CARBON RESISTOR	560 5% 1/6W
	RS 17	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	SS 01	QS04H11-V02Z	TACT SW	
	SS 02	QS04H11-V02Z	TACT SW	
	SS 03	QS04H11-V02Z	TACT SW	
	SS 04	QS04H11-V02Z	TACT SW	
	SS 05	QS04H11-V02Z	TACT SW	
	SS 06	QS04H11-V02Z	TACT SW	
	SS 07	QS04H11-V02Z	TACT SW	
	SS 08	QS04H11-V02Z	TACT SW	
	SS 09	QS04H11-V02Z	TACT SW	
	SS 10	QS04H11-V02Z	TACT SW	
	SS 11	QS04H11-V02Z	TACT SW	
	SS 12	QS04H11-V02Z	TACT SW	
	SS 13	QS04H11-V02Z	TACT SW	
	VRT01	VCV1001-110	VR	
	VRT02	VCV1001-110	VR	

A	REF.	PARTS NO.	PARTS NAME	REMARKS
	RM 71	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RM 72	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RM 73	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RM 74	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RM 75	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RM 76	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W
	RM 77	QRD161J-3R9	C RESISTOR	3.9 5% 1/6W
	RM 79	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W
	RM 80	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	RM 81	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W
	RM 82	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W
	RM 83	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	SC 01	QSP2K21-V01	PUSH SWITCH	
	SC 02	QSP2K21-V01	PUSH SWITCH	
	TF 01	EF0101-002	FILTER	
	XM 01	VCX5000-001	CRYSTAL	
	XM 02	CSA4.19MG933	CERA LOCK	

13 Illustration of Packing and Parts List

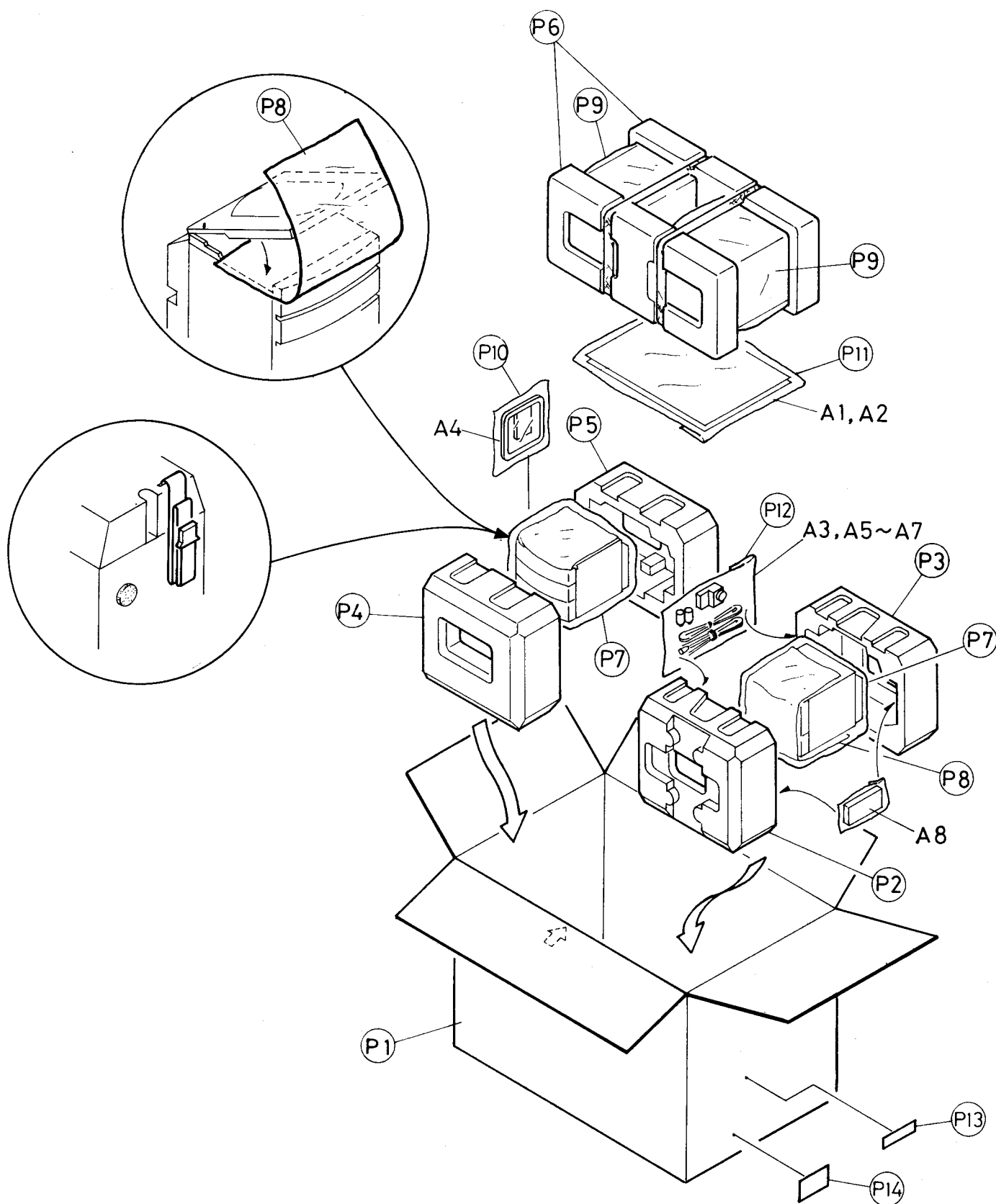
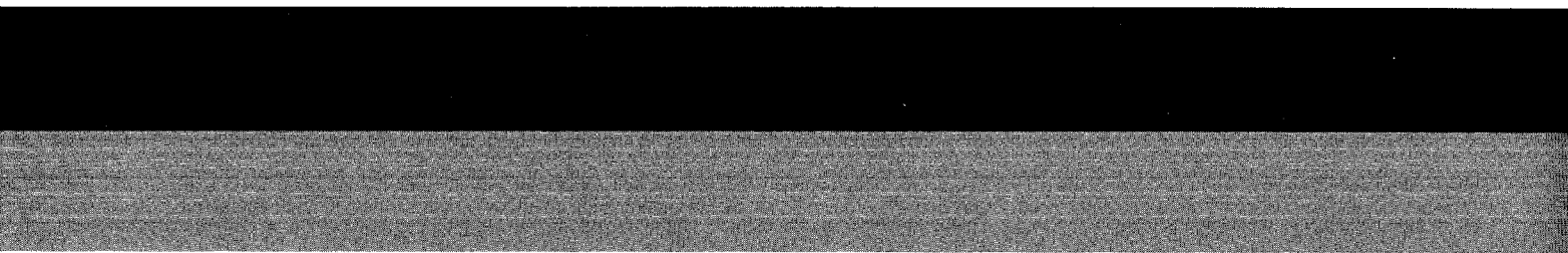


Fig. 13-1

■ Packing & Accessories Parts List

REF. NO.	PARTS NO.	PARTS NAME	REMARKS	Q'TY
P1	VPC9189-001	CARTON		1
P2	VPH1598-001	CUSHION (F1)	TAPE DECK SECTION: FRONT	1
P3	VPH1598-002	CUSHION (R1)	TAPE DECK SECTION; REAR	1
P4	VPH1599-001	CUSHION (F2)	CD PLAYER SECTION: FRONT	1
P5	VPH1599-002	CUSHION (R2)	CD PLAYER SECTION: REAR	1
P6	DH404-UX-A3	CUSHION SET	FOR SPEAKER SYSTEM	1 set
P7	VPE3005-065	ENVELOPE	TAPE DECK/CD PLAYER SECTIONS	2
P8	VPK4002-009	SHEET	TAPE DECK/CD PLAYER SECTIONS	2
P9	DH434-PC-X1000	ENVELOPE	FOR SPEAKER SYSTEM	2
P10	VPE3005-042	ENVELOPE	FOR AM LOOP ANTENNA	1
P11	VPE3005-007	ENVELOPE	INSTRUCTIONS BOOK, WARRANTY CARD	1
P12	QPGA010-03003	ENVELOPE	FOR ACCESSORIES A3—A6	1
P13	VND3044-003	SERIAL TICKET	UX-A3E	1
	VND3044-004	SERIAL TICKET	UX-A3B	1
	VND3044-005	SERIAL TICKET	UX-A3G	1
P14	VND3025-160	EAN CODE LABEL		1
A1	VNN9189-261	INSTRUCTIONS	UX-A3E/G/EN	1
	VNN9189-251	INSTRUCTIONS	UX-A3B/GI	1
A2	PU36158	FTZ INFORMATION SHEET	UX-A3G	1
	BT20066A	WARRANTY CARD	UX-A3B/G	1
	BT20114	SAFETY CARD	UX-A3G	1
	BT20060	SAFETY CARD	UX-A3B	1
	E43486-340B	SAFETY INSTRUCTION SHEET	UX-A3B	1
A3	EWP502-001	FM ANTENNA		1
A4	EQB4001-015	LOOP ANTENNA STAND		1
A5	VMP0093-002	SPEAKER CORD		2
A6	UM4NJ-2P	BATTERY	FOR REMOCON UNIT	2
A7	UGZ0112-001	CHANGE PLUG		1
A8	VGR0013-001	REMOCON UNIT		1



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